Deliverable VI
Organic Crops: Report on Research of Additional Price Elections

Contract Number: AG-645S-C-09-0003

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Risk Management Agency

Submitted by:
Watts and Associates, Inc.
4331 Hillcrest Road
Billings, Montana 59101
twatts@wattsandassociates.com
DUNS # 112960633

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SECTION I. EXECUTIVE SUMMARY

The Organic Foods Production Act, Title XXI of the 1990 Farm Bill, established Federal standards for the production, handling, and labeling of organic crops. The Title also identified processes for implementation of these standards through the United States Department of Agriculture (USDA). The Agricultural Marketing Service (AMS) of USDA issued regulations establishing the National Organic [Production] Program (NOP). NOP regulations (7 CFR Part 205) prohibit the use of genetically modified organisms, ionizing radiation, and sewage sludge in organic food or feed production and handling. Natural (non-synthetic) substances are generally allowed in organic production under these regulations and synthetic substances are generally prohibited. Consequently, organic crops are raised without the use of most conventional pesticides or petroleum-based and sewage-sludge-based fertilizers.

The U.S. markets for organic products have been expanding since the 1970s. The 2007 USDA Census of Agriculture (Census) documented 20,437 farms engaged in organic production on 2,577,418 acres, with organic crops harvested from 1,288,088 acres on 16,778 farms. Most of the differences between the total documented production and the documented crop production are 975,380 acres of organic pasture on 7,268 farms. The Census reported the value of organic crops, including nursery crops and organic crops produced in greenhouses, was $1,121,774,000. While much less than one percent of major commodity crops are grown under certified organic farming practices, larger portions of some specialty crops (especially fruits, vegetables, and specialty grains) are grown under these practices. Over 90 percent of organic crop sales were from farms with organic crop sales of $50,000 or greater, with average sales for the "over $50,000" sales grouping of $381,755. Some farms have a major presence in organic markets.

Federally supported insurance for organic crops has been substantively influenced by legislative action. The Agricultural Risk Protection Act of 2000 (ARPA) required recognition of a certified organic farming practice as "a good farming practice" by the Risk Management Agency (RMA) and required insurance coverage be offered for already insured crops produced under these practices. The Food, Conservation, and Energy Act of 2008 called for "the development of a procedure….to offer producers of organic crops an additional price election that reflects actual prices received by organic producers for crops from the field (including appropriate retail and wholesale prices), as established using data collected and maintained by the Secretary [of Agriculture] or from other sources." RMA awarded Contract Number AG-645S-C-09-0003 to address the public policy issues regarding insurance of organic production identified in the Food, Conservation, and Energy Act.

It is important to note the structure of the contracted work on pricing, as described in the solicitation, the Contractor's proposal, and Contract Number AG-645S-C-09-0003 are highly sequential. The Contractor was first directed to research pricing arrangements for organic crops to determine if price data consistent with data standards contained in the contract are available. After this general pricing research is completed and reviewed by RMA, actual pricing[1] activities for selected crops may be considered as an optional activity under the contract.

[1] The term "pricing," as used herein when referring to RMA, identifies the activity of establishing the price elections for a crop/type/variety/region, etc.

The USDA Economic Research Service (ERS) has compiled farm-gate price series for broccoli (1999-2007) and carrots (1999-2007) as well as wholesale price series for broccoli (1999-2007), carrots (1995-2007), mesclun salad greens prices (1995-2007), and some vegetables (1999-2001, 2005-08), and fruit prices (1993-2001, 2005-08) in Boston and/or San Francisco. These series are derived from data collected primarily by AMS surveys. The AMS collects and publishes frequent (biweekly) reports on prices for major organic commodities (corn, oats, feed-grade barley, soybeans, and to a lesser extent feed-grade wheat, peas, and rye – 2007-2009), although these reports are not compiled, except in the ERS summaries identified above. Generally, AMS market point surveys do not include data on quantities sold at a particular price. The farm-gate prices used were those reported in "Organic Food Business News." The collection methodology of these data is not well documented. Limited USDA National Agricultural Statistics Service (NASS) data on organic production have been published, primarily acreage and farm number reports as elements of the Census. NASS is currently conducting a wide-scale survey of organic producers and producers in transition to organic agriculture. Survey instruments were mailed in early May 2009 with responses due by June 17, 2009. The survey will consider many aspects of organic agriculture in 2008, ranging from production and marketing practices to income and expenses. Results are expected to be available in late 2009.

Numerous additional attempts, primarily by advocacy groups, have been made to characterize the prices of organic crops. The Contractor compiled data from Federal and private published reports, advocacy organizations collecting organic data, first point of purchase buyers, cooperatives, and producers. In addition to the Federal sources of data, the data collection processes used by the Contractor touched more than a thousand individuals involved in organic foods and feed industries.

Organic producers market their crops in a variety of venues. Commodity price arrangements are made with food and feed processors, mills, packers, distributors, wholesalers, brokers, other farm operations, and grower cooperatives. Wholesale price arrangements are made with natural and conventional food stores and chains, restaurants, caterers, hospitals, schools, food processors, and brokers. Retail price arrangements are made through farm stands, farmers' markets, Community Supported Agriculture (CSA) shares, mail order sales, internet sales, and at U-pick operations. Some operations have sales at all these levels.

Although available data indicate organic production often sells at a price premium relative to conventional production, RMA has heretofore priced organic production "conservatively," as an element of the total production of the crop which has minimal impact on the aggregate crop price. Under current USDA RMA Crop Insurance Handbook guidelines, organic crops are valued at the same price as their conventional counterparts. The Handbook states: "Price elections or dollar amounts of insurance applicable to both certified organic and transitional crops will be the same price elections or dollar amounts of insurance for conventional crops published by RMA as shown on the actuarial documents." Given the relatively small volume of organic production compared with the same commodity produced conventionally and the limited pricing data for organic crops, there is an inherent logic to this approach. However, a substantial unintended consequence of this pricing approach is to underinsure U.S. organic production, thereby limiting the safety net for producers venturing into organic crop markets. The current pricing approach also has consequences on the premiums actually paid by producers; organic

producers indicated they consider insuring at a higher coverage level because their insured liability is based on conventional prices but on yields consistent with organic practices. By increasing the coverage level, they can address the prices they actually receive for their crops and the sometimes higher costs of production associated with organic practices. Yet, since the relative subsidy is scaled down as coverage levels increase, organic producers receive less subsidy per acre than they would under a pricing approach addressing the higher prices generally associated with organic production.

The datasets collected by the Contractor were evaluated under the criteria stated in Section 5.4.2.1. of the contract. With the exception of organic cotton data, the data collected by the Contractor do not meet all data sufficiency criteria outlined in the contract. However, based on the Contractor's research, the data collected by the USDA AMS should be of sufficient quality to support development of organic price elections for corn and soybeans, if the requirements for quantity sold at a price are relaxed. In particular, RMA is concerned the lack of volume data makes it impossible to calculate weighted average prices for organic commodities. Based on the large disparity in crop value, RMA could elect the most conservative possible approach – assume all production was sold at the lowest reported price, and still calculate price elections for organic production that are more reflective of prices realized than the conventional price elections currently in use. The Contractor, therefore, recommends development of organic price elections for organic cotton, corn, and soybeans. Initially these elections will need to reflect available data and therefore cannot address disparities in price by type. Over time, type specific data may allow an expansion of elections to address those pricing disparities.

However, the limited price series for certified organic production do reveal a premium for the organic crop prices relative to the conventional counterparts. While the price premiums vary through time, and especially among crops, the presence and financial impact of those premiums is evident across many disparate data sources. The current pricing approach for insurance, valuing organic production at conventional prices, creates a number of issues with the incentives for crop insurance participants. Since only one of the available datasets for crops meets the Section 5.4.2.1 criteria, and two others from AMS meet those requirements excepting the requirement for quantity sold at each price, most available datasets cannot be used for a precise analysis of pricing for insurance. The Contractor therefore recommends RMA consider relaxing the data sufficiency requirements outlined in the contract and establishing organic price elections using alternative price election procedures based on ~~"o~~organic price factors" or a contract production pricing approach where data can support a reasonable measure of confidence. Prices developed under this approach are likely to be less precise than prices developed with data meeting all Section 5.4.2.1 criteria, and therefore likely falling short of producers' expectations based on their on-farm experience. However, these prices are likely to be more acceptable to producers than the current price elections.

Finally, since crops grown on transitional acreage cannot be labeled as organic and are generally sold into the conventional market, the Contractor recommends the price election for insurance of these transitional crops continue to be those used for crops grown under conventional practices. Furthermore, since a fraction of organic crops are sold at conventional farm-gate prices, underwriting to assure an appropriate price election for this fraction of production (but not for

production realizing a higher farm-gate income through wholesale or retail sales) should be considered.

SECTION II. INTRODUCTION AND OVERVIEW

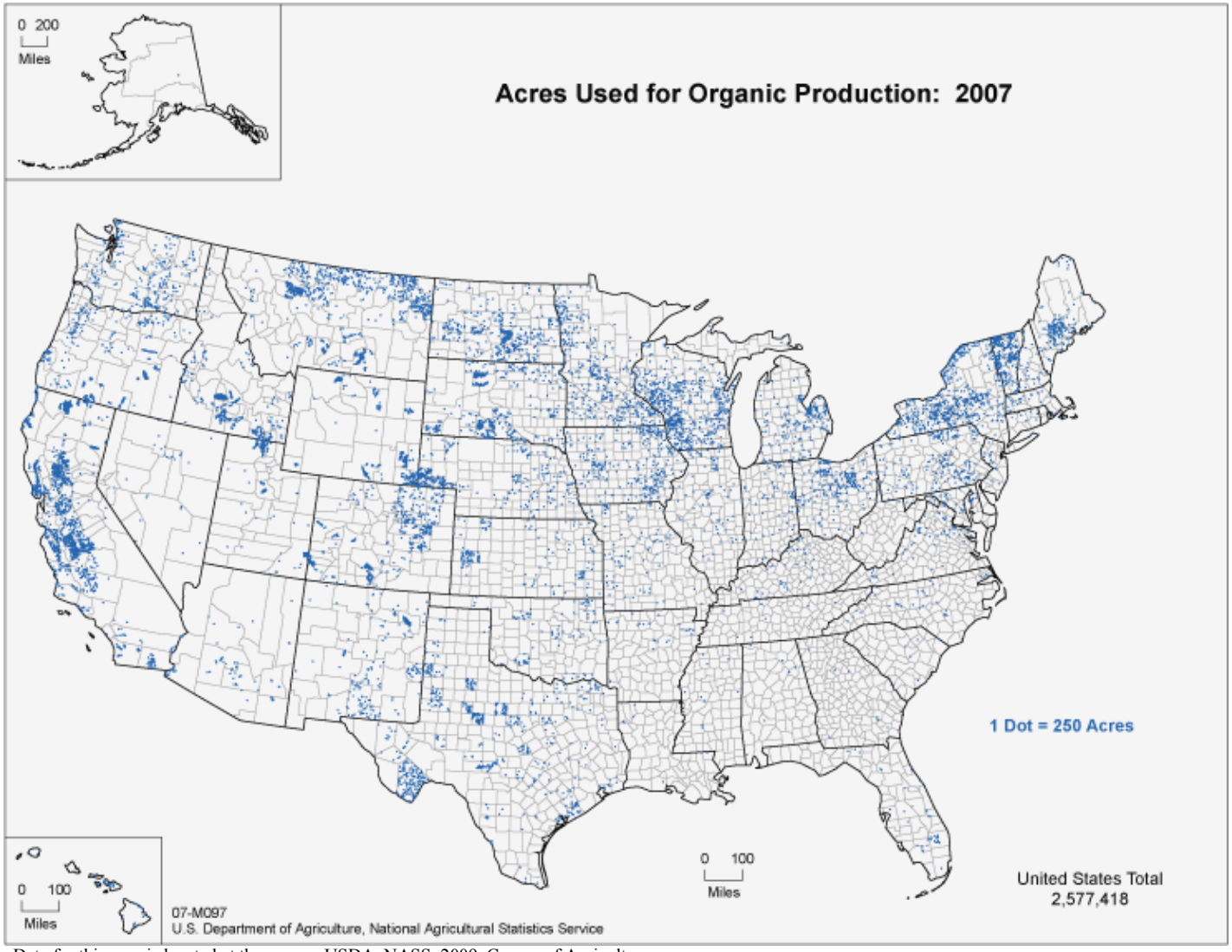
The Organic Foods Production Act (OFPA) was Title XXI of the 1990 Farm Bill.[2] This title provided a mechanism to establish Federal standards for production, handling, and labeling of organic crops and was incorporated into the United States (U.S.) Code as Chapter 94 of Title 7.[3] The language of OFPA also identified processes for oversight of Federal organic standards by the USDA NOP, which "develops, implements, and administers national production, handling, and labeling standards for organic agricultural products."[4]

Use of natural (non-synthetic) substances is generally allowed in organic production under NOP regulations, while use of synthetic substances is prohibited. Consequently, organic crops are produced without utilizing conventional pesticides, except pesticides like pyrethrins derived from natural sources. Organic crops are also grown without the use of petroleum-based and sewage-sludge-based fertilizers. Furthermore, the NOP regulations prohibit the use of genetic engineering and ionizing radiation in organic production and handling.

Prior to the industrial revolution, most agricultural production was carried out using practices that would be quite familiar to organic producers. As transportation systems improved and chemical manufacturing was industrialized, substantial changes in crop production practices occurred. The "organic" farming "concept" developed in the late 19th Century, as consumers became aware of these changes. The practices were largely abandoned during the period between the two World Wars, a period of rapid developments in synthetic organic chemistry. Interest in organic production was renewed in the 1970s, and U.S. markets for organic products have been expanding ever since.[5] In 2005, organic farmland was certified under NOP standards in all 50 states. Yet certified organic cropland and pasture comprised only about 0.5 percent of total U.S. farmland. The 2007 Census documented 20,437 farms engaged in organic production on 2,577,418 acres (Figure 1 and Appendix A), with organic crops harvested from 1,288,088 acres on 16,778 farms. Most of the differences between the total documented organic production and the documented organic crop production are 975,380 acres of organic pasture on 7,268 farms. The Census reported the value of organic crops in 2007, including nursery crops and organic crops produced in greenhouses, was $1,121,774,000.[6] While much less than one percent of major commodity crops are grown under certified organic farming practices, larger portions of some specialty crops (especially fruits, vegetables, and specialty grains) are grown under these practices.[7] Over 90 percent of sales were from farms with organic crop sales of $50,000 or more, with average sales for the "over $50,000" sales grouping of $381,755, including some very large operations.[8] There are also a large number of relatively small organic crop producers, including many entry-level farmers.

[2] Federal Organic Foods Production Act of 1990, 2004, http://www.sarep.ucdavis.edu/Organic/complianceguide/national6.pdf, accessed March, 2009.
[3] U.S. Code, Title 7, Chapter 94, 2007, http://www.law.cornell.edu/uscode/7/usc_sup_01_7_10_94.html, accessed March, 2009.
[4] USDA, AMS, National Organic Program: Program Overview, 2009, http://www.ams.usda.gov/AMSv1.0/ams.fetchTemplateData.do?template=TemplateA&navID=NationalOrganicProgram&leftNav=NationalOrganicProgram&page=NOPNationalOrganicProgramHome&acct=nop, accessed April, 2009.
[5] Vogt, G., 2007, The Origins of Organic Farming, in Organic Farming: An International History, ed. by W. Lockerwetz, CAB International, Oxford University Press, pp. 9-29.
[6] USDA, NASS, 2009, 2007 Census of Agriculture, Table 43, Organic Agriculture 2007, http://www.agcensus.usda.gov/Publications/2007/Full_Report/Volume_1,_Chapter_2_US_State_Level/st99_2_043_043.pdf, accessed April, 2009.
[7] USDA, ERS, 2009, http://www.ers.usda.gov/Data/Organic/, Datasets: Organic Production, accessed April, 2009.
[8] USDA, NASS, 2009, Census of Agriculture, Table 48, Organic Agriculture 2007, http://www.agcensus.usda.gov/Publications/2007/Full_Report/Volume_1,_Chapter_1_US/st99_1_048_048.pdf.

FIGURE 1. Distribution of U.S. Organic Crop and Forage Acreage in 2007



Data for this map is located at the source: USDA, NASS, 2009, Census of Agriculture
http://www.nass.usda.gov/research/2007mapgallery/album/Farms/Land_in_Farms_and_Land_Use/slides/Acres%20Used%20for%20Organic%20Production.html

The USDA NASS is currently conducting a wide-scale survey of organic producers as well as producers in transition to organic agriculture. Survey instruments were mailed in early May 2009, with responses due by June 17, 2009.[9] The survey will consider many aspects of organic agriculture in 2008, ranging from production and marketing practices to income and expenses. Results are expected to be available in late 2009.[10] Through this survey, NASS will gather additional information on how organic farming is changing agriculture in the United States. The questions in the Organic Production Survey (Appendix B) are comprehensive and wide-ranging.[11] The survey will also gather data on total production and production values by crop across the United States. These will be the first comprehensive crop-level organic data collected by Federal survey. The responses to the survey will substantially increase virtually every type of data available on commercial U.S. organic production practices, insurance participation, marketing, and earnings.

Insurance of organic crops has been influenced substantively by Federal legislation. ARPA required RMA to address certified organic farming practices as good farming practices and to provide insurance coverage for crops produced under these practices. FCIC coverage was initially provided for organic producers through written agreements and subsequently through standard crop insurance policies, using standard policy terms, including the prices provided for conventional crops, but with a five percent higher premium to account for:

(1) The limited available insurance experience for the practices,
(2) RMA's producer yields-based rate theory, and
(3) Uncertainty related to the organic practices.

The Food, Conservation, and Energy Act of 2008 further required RMA to contract for

> *~~"~~a review of the underwriting, risk, and loss experience of organic commodities covered by RMA, as compared with the same commodities produced in the same counties and during the same crop years using conventional non-organic production methods", and "the development of a procedure, including any associated changes in policy terms or materials required for implementation of the procedure, to offer producers of organic crops an additional price election that reflects actual prices received by organic producers for crops from the field (including appropriate retail and wholesale prices), as established using data collected and maintained by the Secretary [of Agriculture] or from other sources.*"[12]

The Food, Conservation, and Energy Act of 2008 targets implementation of additional price elections for organic crops with sufficient data for the 2010 crop year. The procedure(s) identified for organic crop pricing are to be expanded as quickly as practicable as additional data becomes available, ~~"~~with a goal of applying this procedure to all organic crops not later than the

[9] USDA, NASS, 2009, USDA to Conduct First Wide-Scale Survey of Organic Agriculture http://www.agcensus.usda.gov/Newsroom/2009/04_23_2009.asp**,** April, 2009.
[10] ibid.
[11] USDA, NASS, 2009, 2008 Organic Production Survey, http://www.agcensus.usda.gov/Surveys/Organic_Production_Survey/organics_reportform.pdf
[12] Public Law 110–246—June 18, 2008 Section 12023, http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110_cong_public_laws&docid=f:publ246.pdf, accessed March, 2009.

fifth full crop year that begins after the date of enactment of the Food, Conservation, and Energy Act of 2008."[13]

RMA subsequently awarded Contract AG-645S-C-09-0003, Organic Crops: Review of Risk and Loss Experience and Development of Additional Price Election Procedures, to support research to –(1) review actuarial appropriateness of RMA's organic rates and organic pricing arrangements, and (2) research pricing arrangements of organic commodities and, pending RMA and Contracting Officer approval, provide price procedures for RMA to develop additional price elections for all or any applicable organic commodities."[14] Specifically, –The contractor shall research pricing arrangements of organic commodities to determine if data that [are] consistent with price data standards utilized by RMA [are available].."[15] An additional RMA objective of this contract identified in the solicitation is to facilitate the eventual establishment of unique organic practice rating components as more insurance experience is accumulated and research is completed. This rating objective is being addressed in other deliverables under this contract and in subsequent projects as data become available.

It is important to note the structure of the contracted work on pricing, as described in the solicitation, the Contractor's proposal, and the contract itself, are highly sequential. Cognizant of the limitation inherent in the scope of this contract and of constraints imposed upon data collection by the Government and its contractors under the Paperwork Reduction Act, the Contractor made extensive efforts to assemble available organic crop data from a wide variety of sources.

The Contractor first made exhaustive efforts to gather data from as many sources as possible on pricing arrangements and pricing used for organic production. The Contractor then examined these data, with special attention to the context provided by Section 5.4.2.1: Price Data Criteria.

- 5.4.2.1.1. The emphasis of this task should demonstrate the Contractor's ability to find factual information that meets certain criteria. If the information found does not meet all requirements, the Contractor shall identify and report any deficiencies in summaries, presentations and reports required in this task. All substitute information shall be documented and justified;
- 5.4.2.1.2. The data should be credible, reliable, and available on an annual basis to RMA, such that RMA may be able to retrieve the data themselves in order to provide updated annual reports to the Secretary;
- 5.4.2.1.3. The collected price information at the farm-level shall have:
  - 5.4.2.1.3.1. The amount or quantity sold associated with the price documented; and
  - 5.4.2.1.3.2. The method of sale (contract or open market) and location documented with the price; and
  - 5.4.2.1.3.3. Contractual arrangement.
- 5.4.2.1.4. Price information that is not available at the farm-level shall:
  - 5.4.2.1.4.1. Be verifiable by a disinterested third party, whenever possible; and

[13] Ibid.
[14] USDA, RMA, 2008, Organic Crops: Review of Risk and Loss Experience and Development of Additional Price Election Procedures Solicitation, and USDA, RMA, 2009, Contract AG-645S-C-09-0003, section 5.3.
[15] USDA, RMA, 2008, Organic Crops: Review of Risk and Loss Experience and Development of Additional Price Election Procedures Solicitation, and USDA, RMA, 2009, Contract AG-645S-C-09-0003 section 5.4.2,

- 5.4.2.1.4.2. Be acceptable if buyer prices are aggregated to protect buyer identity as long as supplementary buyer information supports active participation in the market, and
- 5.4.2.1.4.3. Be acceptable if it provides the necessary information that allows prices to be adjusted to the farm-level.

The Contractor also searched for published open market sales prices. As data permitted, the Contractor established season average farm-level price by commodity, and where possible, season average farm-level prices were coupled with unit quantities. Finally, available historical farm-level prices for each organic commodity were compared to the corresponding conventional prices used by RMA in Actual Production History (APH) and revenue plans of insurance.

Only after this general research is reviewed by RMA will actual pricing activities be considered as an optional activity under the contract. The work encompassed under Contract AG-645S-C-09-0003 is particularly challenging due to the breadth of organic crops produced, the wide range of locations involved in organic production, the range of marketing arrangements, and the relatively limited data available. Limited NASS data on organic production have been published, primarily as elements of the Census. The USDA National Agricultural Library (NAL) has compiled a comprehensive collection of Federal electronic documents addressing organic production,[16] although few of these address quantitative characteristics of these crops. The USDA ERS has compiled farm-gate and wholesale pricing series for broccoli and carrots, grain and feedstuff pricing for 2007, and historic wholesale prices for several fruits (1993-2001) and vegetables (1999-2001).

USDA RMA data show that from 2001 through 2008 the number of states with insured organic crops increased from 26 to 38. The insured acreage increased from almost 28,000 to more than 450,000 acres, while policies earning premium increased from 145 to 3,413 (Table 1).

TABLE 1. STATES, ACREAGE, AND FCIC POLICIES EARNING PREMIUM FOR INSURED U.S. ORGANIC PRODUCTION

Year	States	Acres	Policies Earning Premium
2001	26	27,939	145
2002	25	72,789	445
2003	26	77,768	578
2004	33	225,540	1,520
2005	34	282,993	1,906
2006	36	352,974	2,415
2007	37	419,428	2,976
2008	38	458,860	3,413

Source: Analysis of RMA Summary of Business Data, May, 2009

[16] USDA, NAL, 2008, Organic Production and Organic Food: Information Access Tools, http://www.nal.usda.gov/afsic/pubs/ofp/ofp.shtml, accessed March, 2009.

The number of counties with insured organic crops increased to 519, continuing a pattern of increase from the previous years (Appendix C). All crops insured by RMA under FCIC programs are eligible for insurance under organic production practices. In 2008, producers chose to insure a wide variety of organic crops under FCIC programs (Table 2). The insured crops ranged from a single unit of filler tobacco on half an acre to 1,788 units of wheat comprising almost 200,000 acres.

Table 2. 2008 Crops Insured by Producers as Organic Under FCIC Plans of Insurance

2008 Organic Crops Insured Under FCIC Plans of Insurance

Alfalfa Seed	Citrus - Florida (continued)	Corn, Popcorn	Peaches, Fresh Freestone
Almonds	Citrus IV - Navel Oranges	Corn, Sweet	Peas, Dry
Apples	Tangelos, and Tangerines	Cotton	Peas, Green
Apricots, Fresh	Citrus V - Murcott and Temple	Cotton - Extra Long Staple	Peanuts
Apricots, Processing	Oranges	Cranberries	Pears
Avocados	Citrus VII - Grapefruit and	Figs	Plums
Barley	Late Oranges	Flax	Potatoes
Beans, Processing	Citrus - Texas	Forage Production	Prunes
Beans, Dry	Grapefruit	Forage Seeding	Rye
Blueberries	Citrus Trees - Florida	Grain Sorghum	Safflower
Cherries	Grapefruit Trees	Grapes	Soybeans
Citrus - California and Arizona	Orange Trees	Grapes, Table	Strawberries
Lemons	All Other Citrus Trees	Macadamia Nuts	Sunflowers
Mineola Tangelos	Citrus Trees - Texas	Macadamia Trees	Tobacco, Burley
Mandarins	Citrus Trees I - Early and	Millet	Tobacco, Cigar Filler
Grapefruit	Midseason Orange Trees	Mustard	Tobacco, Cigar Binder
Oranges, Valencia	Citrus Trees IV - Rio Red and	Nectarines, Fresh	Tobacco, Flue Cured
Oranges, Navel	Star Ruby Grapefruit Trees	Oats	Tomatoes
Oranges, Sweet	Citrus Trees V - Ruby Red	Onions	Walnuts
Citrus - Florida	Grapefruit Trees	Peaches	Wheat
Citrus I - Early and Midseason	Corn	Peaches, Cling Processing	Wild Rice, Cultivated
Oranges	Corn, Hybrid Seed	Peaches, Freestone Processing	

Source: Analysis of RMA summary of Business Data, June, 2009

The focus of this deliverable is on adequacy of data for pricing. Prices for organic crops are generally somewhat higher than prices for crops produced under conventional practices. The price differences between organic and comparable conventional products are ―price premiums." The USDA has reported that these premiums ―have contributed to growth in certified organic farmland and…market expansion in an industry that was formerly supply constrained."[17]

The price data collected by the Contractor and the Contractor's assessment of these data address the questions raised in the ―scope of work" described in the solicitation and the ensuing contract. The remainder of this report documents:

[17] Oberholtzer, L., C. Dimitri, and C. Greene, 2005, Price Premiums Hold on as U.S. Organic Produce Market Expands, USDA, ERS, Electronic Outlook Report from the Economic Research Service, VGS-308-01, www.ers.usda.gov/publications/vgs/may05/vgs30801/vgs30801.pdf, accessed March, 2009.

- A description of the current FCIC pricing approach:
- The variety of existing organic crop private price arrangements;
- The process for the data collection activities;
- An assessment of the data sufficiency: and
- Recommendations for pricing for crop insurance that ~~re~~flects actual prices received by organic producers for crops from the field (including appropriate retail and wholesale prices)."

SECTION III. CURRENT ORGANIC PRICING FOR FCIC INSURANCE

Under the approach currently used for FCIC crop insurance, organic crops are valued using the same price election as their conventional counterparts. The Crop Insurance Handbook states: "The price elections or dollar amounts of insurance applicable to both certified organic acreage and transitional acreage will be the price elections or dollar amounts of insurance published by RMA for the crop grown under conventional means for the current crop year." [18] Furthermore, the Handbook goes on to state, "There is no additional quality adjustment for certified organic and transitional acreage. The quality adjustment procedures that apply to conventional acreage also apply to certified organic, transitional, or buffer zone acreage."[19] Yet producers who opt to insure their organic production under a Federal Crop Insurance Program pay a surcharge of five percent on their premiums, which in the case of many crops already are higher per unit of production insured since average yields tend to be lower.[20] This surcharge is to address the limited available insurance experience for the organic practices, an evaluation of risk under the RMA producer yields-based rate theory when it is applied to a crop and uncertainty related to the organic practice.[21] Consequently; the current crop insurance approach for organic crops implies added risk (by the rate surcharge) with no potential for greater reward (by the limitations on liability per unit of production imposed by the pricing structure).

Available data indicate organic production commands a premium in price relative to conventional production of the same commodity. However, RMA has elected to value organic production "conservatively" by using the same price election as was established for the conventionally produced commodity. The Contactor acknowledges it is difficult to collect meaningful organic crop price data on a commodity by commodity basis, but price data for conventionally produced commodities can also be difficult to obtain for some crops and types.

In cases of uncertainty (as in the case of uncertainty concerning the interpretation of pricing data), a conservative economic approach is often applied. Since data for conventional production are available and generally robust, and since insurance pricing for these crops is already being completed, there is an administrative efficiency in linking organic pricing to conventional prices. However, it appears the particular linkage has had unintended consequences on the insurance of organic production under the FCIC Crop Insurance Programs.

There is an argument that the present approach is unduly conservative. In yield-based insurance, the price election is nothing more than a device to monetize the value of the insurance guarantee (stated in bushels, pounds, tons, etc.) and to monetize the quantity of any loss of production. The price election does not enter into any calculations of quantity lost. Hence, it is a neutral factor in the insurance plan with regard to indemnities except to the extent that it might be unduly high relative to the true value of the commodity and induce actions on the part of the insured that contribute to morale and moral hazards. The Contractor notes the discrepancy in pricing must be large to induce a deliberate loss of yield since, in most cases the insured must endure at least the

[18] USDA, RMA, 2007, Crop Insurance Handbook, Exhibit 38: Organic Crop Underwriting Procedures, Section 5, http://www.rma.usda.gov/FTP/Publications/directives/18000/PDF/07_18010.pdf, accessed May, 2009.
[19] USDA, RMA, 2007, Crop Insurance Handbook, Exhibit 38: Organic Crop Underwriting Procedures, Section 6, http://www.rma.usda.gov/FTP/Publications/directives/18000/PDF/07_18010.pdf, accessed May, 2009.
[20] Premium rates for many crops are based on the ratio of the approved yield to a reference yield, with an inverse relationship of premium rate to the yield ratio. Other crops have a fixed rate that applies regardless of the average yield of a unit.
[21] USDA, RMA, 2008, Organic Crops: Review of Risk and Loss Experience and Development of Additional Price Election Procedures Solicitation.

first 25 percent of lost revenue potential. The relationship is somewhat more complex for revenue-based products, since these products operate with both a base and harvest price (generally derived from commodity exchange values). Furthermore, some revenue products have price factors to address special production by increasing the base and harvest prices above those established by board trades. Careful attention to these differences would be required, particularly for crops that can be stored, if sufficient data were available to support organic price elections under the system for price elections used for revenue products.

Effects of Current Pricing on Insured Liability

In 2007, the organic producer community participated in crop insurance programs at about half the level of participation for conventional producers.[22] Testimony from numerous producers and from representatives of organic producer organizations suggests an almost universal perception that application of the conventional pricing is either inadequate or unfair. When expected real organic production prices are higher than prices for the same crops grown conventionally, producers are underinsured, regardless of the level of coverage they elect. In a yield-based policy like APH insurance, the coverage will trigger appropriately if a covered peril reduces the production, but the producer will be compensated for the loss at a value less than would have been earned from selling the lost production in the open market. Consider the following hypothetical example.

Producer A is a corn producer with two 100 acre units in Any County, Iowa. Unit 1 is managed under conventional practices; Unit 2 is farmed organically. Producer A purchases crop insurance under the APH plan for both units at the 65 percent coverage level. Producer A has kept detailed yield records for each unit. The simplest assumptions to illustrate the effect of the current pricing structure is that the organic production average yield is equal to the yield for conventional production over time (Table 3) and production costs under the two practices are also equal.[23] Producer A reports the yield histories for each unit appropriately.

TABLE 3. 2000-2008 Hypothetical Conventional and Organic Production by Producer A

APH Year	Conventional Unit 1	Organic Unit 2
2000	160	180
2001	180	171
2002	171	134
2003	134	175
2004	175	139
2005	139	144
2006	144	170
2007	170	122
2008	122	160
Average	**155**	**155**

[22] Based on 2007 Census of Agriculture total crop production data and RMA Summary of Business as compiled by the Contractor.
[23] Note that this assumption does not address the wide range of relationships of the cost structures between the two practices. Furthermore, a similar range of relationships exist between yields under the two practices. However, this simplification does not invalidate the conclusion; it merely affects the magnitude of the difference, not the direction.

Producer A then contacts the agent to purchase insurance and learns that, although these two units are located in the same county, the premium rates for these two units differ. The organic crop has a higher rate based on the current RMA premium rating structure, which assesses a five percent surcharge on the premium that applies to a reference yield based on data from NASS, which largely reflects conventional production. Consequently, the premium cost quoted for 65 percent coverage for Unit 1 is based on a rate of 3.6600 percent and for Unit 2 is based on 3.6600 times 1.05 percent.[24] The price election for 2009 is $4.00/bu., which reflects RMA's expectations on pricing for conventional production. At 65 percent coverage, the subsidy rate is 59 percent.

The producer premium for Unit 1 is calculated:

Liability = Round (Expected Yield * Coverage Level, 0) * Acres * Price Election * Share
Liability = Round (155 bu/ac * 0.65, 0) * 100 ac * $4.00/bu * 1.000
Liability = 101 bu * 100 ac * $4.00 * 1.000 = $40,400

Total Premium = Round (Liability * Premium Rate, 0)
Total Premium = Round ($40,400 * 0.0366, 0)
Total Premium = $1,479

Producer Premium = Total Premium – Round (Total Premium* Subsidy Rate), 0)
Producer Premium = $1,479 – ($1,479 * 0.59)
Producer Premium = $1,479 – $873
Producer Premium = $606

The producer premium for Unit 2 is calculated:

Liability = Round (Expected Yield * Coverage Level, 0) * Acres * Price Election * Share
Liability = Round (155 bu/ac * 0.65, 0) * 100 ac * $4.00/bu * 1.000
Liability = 101 bu * 100 ac * $4.00 * 1.000 = $40,400

Total Premium = Round (Liability * Premium Rate * (1 + **Premium Rate Surcharge**), 0)
Total Premium = Round ($40,400 * 0.0366 * **1.05**, 0)
Total Premium = $1,553

Producer Premium = Total Premium – Round (Total Premium* Subsidy Rate, 0)
Producer Premium = $1,553 – Round ($1,553 * 0.59, 0)
Producer Premium = $1,553 – $916
Producer Premium = $637

It is important to note the producer premium for the organic unit (Unit 2) is higher than the producer premium for the conventional unit (Unit 1), despite the fact the hypothetical organic unit and convention unit have identical liabilities and yield histories. If the average yield for the organic unit was lower than for the non-organic unit, the premium would be even higher.

[24] We acknowledge that the requirements of Appendix III are that the premium rate be stated to eight decimal places. We are using only four places for greater clarity.

If each unit suffers a 50 percent loss, the indemnities would be the same for the organic and conventional units. If the organic crop has a price premium in the market, the producer would not be compensated at a fair value for the loss of production.

Existing Mechanism to Adjust Liability

Continuing the analysis of this hypothetical example, assume the expected price for organic production is 15 percent higher than for conventional production, i.e., the price for organic production is $4.60 per bushel. If Producer A wishes to insure an appropriate liability per acre for Unit 2, either the price election or coverage level needs to be increased. Ideally, Producer A would be able to obtain appropriate coverage by selecting a price election that reflects the higher expected value of the organic production. However, under current rules, Producer A may only select up to 100 percent of the conventional production price election for the organic production. As a result, the only mechanism Producer A has available to increase the guarantee is to increase the coverage level. This is, admittedly, an imprecise proxy, but it is the only mechanism for adjusting liability currently available to the producer.

If Producer A selects the 75 percent coverage level for Unit 2, that action increases the guarantee to roughly the appropriate guarantee at a 15% price premium. The premium rate for 75 percent coverage at a rate yield of 155 bu/ac is 5.21 percent. The subsidy rate at the 75 percent coverage level is 55 percent.

The producer premium for Unit 2 under these circumstances is then calculated:

Liability = Round (Expected Yield * Coverage Level, 0) * Acres * Price Election * Share
Liability = Round (155 bu/ac * 0.75, 0) * 100 ac * $4.00/bu * 1.000
Liability = 116 bu * 100 ac * $4.00 * 1.000 = $46,400

Total Premium = Round (Liability * Premium Rate * (1 + **Premium Rate Surcharge**), 0)
Total Premium = Round ($46,400 * 0.0521 * **1.05**, 0)
Total Premium = $2,538

Producer Premium = Total Premium – Round (Total Premium* Subsidy Rate, 0)
Producer Premium = $2,538 – ($2,538 * 0.55, 0)
Producer Premium = $2,538 – $1,396
Producer Premium = $1,142

To insure appropriate liabilities in the two units, Producer A is assessed a producer premium for the organic production that is almost twice the premium for a comparable value of conventional production. As noted previously, the proxy is imperfect; the higher coverage level (lower deductible) implies there will also be more frequent payments than would be offered under lower coverage levels, but the price differential means the producer will be under-compensated for those marginal losses.

Assuming a price election of $4.60 were offered for the organic practice; the producer could choose the 65 percent coverage level and would pay an out-of-pocket premium of $732 for the appropriate coverage. While this is significantly higher than the cost of insuring the conventional

practice, the difference reflects only the linear change in liability and premium due to the higher price election. Assuming equal probabilities of a loss event between the two conditions, the organic unit will be compensated at a fair amount relative to the relative value of the crop.

The current pricing approach also has consequences for the level of subsidy a producer receives. To achieve liability that is appropriate for their expected production value, organic producers are currently offered no option other than to increase their coverage levels. The declining insurance subsidy scheme laid out in the law (which offers lower relative subsidies for higher coverage levels, as displayed in the example) reduces the relative subsidy for higher coverage levels. This creates a disincentive for organic producers to purchase higher coverage levels because while premiums are higher, the marginal subsidy amount associated with the higher coverage levels is substantially lower.

Either approach (insuring at an appropriate coverage level and a sub-optimal price election or insuring at an elevated coverage level and a sub-optimal price election) creates a less than ideal risk management program for the organic production. Consequently, in the interests of equity for such producers, in the subsequent sections the Contractor identifies crops for which organic price elections can be developed.

SECTION IV. ORGANIC CROP PRIVATE PRICE ARRANGEMENTS

Organic producers market their crops in a wide variety of venues. Farm-gate sales at the commodity, wholesale, and retail levels are common, and some operations have sales at all these levels. Commodity pricing arrangements are made with food and feed processors, mills, packers, distributors, wholesalers, brokers, other farm operations, and grower cooperatives. Wholesale pricing arrangements are made with natural and conventional food stores and chains, restaurants, caterers, hospitals, schools, food processors, and brokers. Retail pricing arrangements are made through farm stands, U-pick operations, farmers' markets, CSA shares, mail order, and internet sales. Furthermore, it is important to note "[o]rganic markets can be volatile, with periods of high demand and short supply for certain crops and periods of high supply and sluggish demand for others."[25]

Clear pricing arrangements facilitate prompt and appropriate payment and limit misunderstandings between the producer and the buyer. Producers and buyers interested in long term relationships generally establish pricing arrangements that are simple and unambiguous. Yet the choice of a crop pricing structure is not solely controlled by the producer. It is influenced by the buyer's business model and capital resources; the market; and the competition within the market. There are several common private pricing arrangements for crops, including:

- Fixed price arrangements;
- Formula Driven (flexible) prices based on:
  - Spot-market values;
  - Average market price;
  - Market price with a guaranteed minimum;
  - Market price with an agreed-upon premium;
- Split prices; and
- CSA shares.[26]

Fixed Price Arrangements

Under a fixed price arrangement, a set price is established and paid for a unit (bushel, pound, etc) of the crop. The price may be based on a cash payment or may be structured to include an element of credit carried by either the buyer or the seller. Regardless of the other elements of the arrangement, the unit value of the crop is often fixed in contract negotiation and not variable thereafter. The fixed price arrangement eliminates price risk for the producer but also limits the potential for gains if market prices increase. The Contractor identified at least one instance where organic crops were sold under a three year rolling contract.[27] Where both supplies and markets are thin, and prices are volatile, this arrangement provides a level of security unavailable in single year contract arrangements. For crops sold after harvest, the fixed prices are generally agreed upon at the time of the sale. Fixed prices for both contract and spot sales are normally influenced by grade specifications of the crop delivered, with higher prices paid for higher quality production.

[25] Born, H., 2005, Marketing Organic Grains, Appropriate Technology Transfer for Rural Areas, / http://attra.ncat.org/attra-pub/PDF/marketingorganicgrains.pdf, accessed March, 2009.
[26] FAO, Corporate Document Repository, 2001, Contract Farming, Chapter 4, http://www.fao.org/docrep/004/Y0937E/y0937e06.htm, accessed May, 2009;
Government of Saskatchewan, Agriculture, 2004, Marketing Forage Seed, http://www.agriculture.gov.sk.ca/Default.aspx?DN=ceceff72-0389-4f5e-bce8-63feff4d23bc, accessed May, 2009.
[27] http://michiganorganic.msu.edu/Portals/0/GrowerPoolBrochure.pdf

Formula Driven (Flexible) Price Arrangements
Some organic crop contractual price arrangements are based on a price formula. The unit price may be tied to spot-market values, average market price, premium over commodity production price, market price supported by a guaranteed minimum, or market price with an agreed-upon fixed dollar premium. Because of the limited published market prices for organic crops, the market prices used as a reference in these flexible arrangements are often market prices for conventional crops.

Split Price Arrangements
Some contracted organic crop price arrangements are based on a more complex price formula. The unit price for some portion of the production is generally fixed. The unit price for the remainder of the production is flexible, tied to spot-market values or average market price. Under split market pricing arrangements, the buyer and seller share the price risk. The price split may incorporate a contractual payment at the signing of the contract or at delivery. Final prices may be realized in as little as a month for seasonal fresh market produce, but if the contract involves processing, final settlement may take a year or more. The Contractor was able to collect data for this complex pricing arrangement for organic cotton.

Community Supported Agriculture
CSA "shares" ("memberships" or "subscriptions") are a mechanism by which a consumer or business buys a predefined fraction of a producer's crop or, more generally, farm output. Generally, shares are purchased prior to production activities. In this way, the producer completes the marketing before the field season and can devote more time to production. Since the payment is often made on the purchase of the share, income may be available to address production costs. LocalHarvest lists more than 2,500 CSAs in their database as of early 2009.[28] No data on price by crop for CSA shares was collected, despite wide-ranging inquiries about organic crop prices. Consumers are generally buying a share in multiple crops during the growing season for a fixed fee per week or other delivery period. The value attributable to individual crops during that growing season is not determinable.

Use of Contract Pricing for Organic Crops
For the purpose of crop insurance, a purchase contract is a binding written agreement between the producer and a buyer. As noted earlier, when organic production is sold under contract, the prices may be fixed, flexible, or based on a split price arrangement. For some FCIC insurance, the base price in a contract is used as an alternative price election. The term "base price" can be defined as:

> *"The price stipulated in the contract without regard to discounts or incentives that may apply, and that will be paid to the producer for at least NN percent of the total production under contract with the buyer."*

RMA allows producers of several crops to establish a price election by using the base contracted price, sometimes controlled by a cap. Thus, any crop for which RMA already permits establishing the price election via a base contract price AND that is grown organically may already have the appropriate premium in the price at which the guarantee is valued and

[28] LocalHarvest, 2009, Community Supported Agriculture, http://www.localharvest.org/csa/, accessed May, 2009.

indemnities are computed. The Contractor obtained copies of purchase contracts from buyers and notes that one buyer may negotiate substantially different terms than another for the purchase of a single crop. The concept may be appropriate for additional crops provided the purchase contract includes a fixed base price for the organically produced commodity, i.e., the contract is not based on the price for the commodity production plus a premium since such an approach will not meet the definition of base contract price. However, it should be noted the Contractor did not find any contract price datasets that meet the Section 5.4.2.1. criteria.

Value of Crops Grown on Transitional Acreage

Subpart 205.202 of Title 7 of the Federal code defines the land requirements for certified organic production under the NOP.

> *"Any field or farm parcel from which harvested crops are intended to be sold, labeled, or represented as "organic," must:*
>
> *(a) Have been managed in accordance with the provisions of §§205.203 through 205.206;*
>
> *(b) Have had no prohibited substances, as listed in §205.105, applied to it for a period of 3 years immediately preceding harvest of the crop; and*
>
> *(c) Have distinct, defined boundaries and buffer zones such as runoff diversions to prevent the unintended application of a prohibited substance to the crop or contact with a prohibited substance applied to adjoining land that is not under organic management."*

RMA defines transitional acreage as "Acreage on which organic farming practices are being followed but has not met the qualifications for certified organic acreage."[29] The Contractor made exhaustive efforts to identify price data series for crops grown on transitional acreage. Since these crops cannot be labeled as organic, they are generally sold into the conventional market. The Contractor found no evidence that crops grown on transitional acreage are sold at a premium over crops grown under conventional practices.

Special Conditions Governing Organic Grains

Marketing organic grains and oilseeds is very different from the conventional counterparts. Elevators and feed buyers normally purchase conventional grains and oilseeds based on a U.S. grade, thus accepting the level of damage and other impurities allowable under that grade standard. In contrast, prices for organic grains and oilseeds are sometimes structured on a "cleaned and delivered" basis. Each buyer may have unique quality requirements, creating a complex set of niche markets for the organic grain producer. Premium markets that require shipment to be 99.9 percent clean[30] often impose substantially greater discounts or dockage fees for less clean production than would apply to conventional production. However, such value added processing activities normally are not recognized as legitimate components of the price election. Thus, the market valuation of such commodities is not a true measure of the value that RMA seeks to establish for valuing the production guarantee and indemnities. Producers of organic crops must recognize this limitation on the valuation established for their production relative to the actual sales price. This is not uncommon among crops insured by RMA.

[29]USDA, RMA, 2007, Crop Insurance Handbook, http://www.rma.usda.gov/FTP/Publications/directives/18000/PDF/07_18010.pdf, accessed July, 2009.

[30] Born, H., 2005, Marketing Organic Crops, Appropriate Technology Transfer for Rural Areas, / http://attra.ncat.org/attra-pub/PDF/marketingorganicgrains.pdf, accessed March, 2009.

The NOP requires organic grain to be handled, processed, and stored in facilities separate from conventionally grown and handled grain. This may require the producer to incur added costs for marketing the crop. Again, such post-harvest costs generally are not recognized by RMA when establishing price elections. While it is challenging to calculate the value of post-harvest costs for some crops, for the major commodity crops there are sufficient reports of cost of production to develop appropriate estimates of post-harvest value added. For these major commodity crops, value-added components tend to be quite similar regardless of the production practices.

Finally, a discussion of marketing major organic commodity crops must include consideration of the type of production and market outlets. Soybean producers in the Midwest have opened markets for organic clear-hilum soybeans in Japan, and U.S. organic specialty grains have an important market in Europe. Yellow dent corn produced organically to be ground into corn flour for sale in domestic outlets likely will have a different price premium than high-lysine corn grown for a specific export outlet. Thus, there may be a fair amount of diversity in price premiums among different types of organic production within a commodity. However, as long as an organically produced commodity is represented as a single price election on the actuarial tables, there is no way to differentiate pricing among different types of organic production for that commodity.

Cooperatives

Flexible pricing is unusual for individual sales of organic production in the United States, but is more common for small farms selling to consolidators. Consolidation of organic production in the United States is frequently implemented through cooperative agreements. Flexible pricing arrangements, especially through cooperative agreements, are often complex.

Marketing cooperatives are found throughout the United States and handle most types of crops. Marketing cooperatives are businesses owned by producers in order to sell their products collectively. Cooperatives are especially important in sales of cotton, grains, oilseeds, and beet sugar. By participating in cooperatives, producers increase their market strength in negotiations with buyers, while they share some risks and non-production costs with other producers. Joining with others in a cooperative provides producers more control over their sales and allows them to bypass independent middlemen. Furthermore, through cooperatives producers gain enough volume to operate efficiently and collectively to meet buyers' demand.

Most cooperatives are ~~"c~~entralized," with membership made up of individual producers from a community or region. Control of the crop passes from the producers to the cooperative; the cooperative makes cash payments to the producer for the crop. Centralized cooperatives generally control marketing, and often grade and aggregate crops from cooperative membership, but they occasionally participate in additional vertically integrated activities like food manufacturing. Federated cooperatives have centralized cooperatives as members, and often cover wider geographic areas than centralized cooperatives. Control of a federated cooperative is vested in the local cooperatives rather than in the individual producers. The federation may act as a sales agent or may be involved in much more complex manufacturing functions.

Cooperatives generally acquire and market crops through either direct purchase or pooling arrangements. Under a direct purchase arrangement, the producer is paid cash at the time the

crop is delivered to the cooperative. The cooperative then resells the products. After the cooperative resells the crops, profits are shared with the producers based on the amount of sales to the cooperative by the producer (often adjusted for quality). These additional payments are generally identified as patronage dividends or refunds, and may be paid out as shares or in cash.

Under pooling arrangements, production of all the cooperative members is physically combined and marketed collectively. Generally, marketing decisions are made by a pool manager, who may be one of the members or a salaried employee. Under pooling arrangements, producers may receive an advance at the time of delivery. Operating costs are deducted from the proceeds of sales; cooperative members receive a final payment for individual production based on the average net price, less the advance the producer received. Progress payments may be made as sales from the pool exceed the collective advance payments and operating costs. Pooling is an alternative approach to share risks, expenses, and revenue. For crops that can be stored a long time, a final ―equalization payment" can address remaining proceeds from sales.

Bargaining cooperatives are a special type of marketing cooperative. These cooperatives negotiate with buyers and processors on behalf of their members, but do not own the commodity or physically handle the product. Producers in bargaining cooperatives sell directly to processors at the price negotiated by the cooperative. Bargaining cooperatives are more common in the processed fruit and vegetable sectors. Often these cooperatives function under marketing orders issued by the USDA AMS.

Conclusion

The range of private price arrangements for organic crops, and the distribution of those arrangements both among the market sectors and geographically, are three complicating elements in addressing the goal of defining a simple, implementable, and defensible pricing protocol for the insurance of organic crops. Data limitations, described in subsequent sections, also create a challenge to developing a single, appropriate pricing protocol.

SECTION V. ORGANIC PRICING DATA COLLECTION

In 2007, the NASS Census documented 16,778 farms harvesting organic crops on 1,288,088 acres. As a follow-up to the organic data collection in the Census, NASS is gathering additional data through the Organic Production Survey. The Organic Production Survey is the first wide-scale survey of organic farming in the United States conducted by the USDA, and represents a scale of data collection that has not been, and likely cannot be, duplicated privately. The survey was sent to all respondents to the Census who indicated they had organic production and also allows participation by organic producers who did not participate in the Census.[31]

The survey will collect comprehensive information about organic acreage, production, and production value for numerous named insured (Table 4) and uninsured (Table 5) organic crops. The survey instrument also allows entry of crop data for crops not listed by NASS. The survey will collect, using a uniform instrument and procedure, essential data to evaluate the production and valuation of insured organic crops. The data collection format will address issues of unit quantity by price, but aggregates the production and valuation data for a full crop year. The broad-ranging and comprehensive scope of the Organic Production Survey is well beyond the scope of data collection anticipated in Contract AG-645S-C-09-0003. Unfortunately, none of the data collected under the survey will be available until after the completion of this study.

TABLE 4. Crops Named in the NASS Organic Production Survey and also Insured under Named-crop FCIC Programs in 2009*

Almonds	Mint, peppermint, and spearmint	Snap beans, for processing
Apples	Oats for grain or seed	Sorghum for grain or seed
Avocados	Onions, dry	Sorghum for silage or greenchop
Barley for grain or seed	Oranges, all	Soybeans for beans
Dry Beans	Peaches, all	Squash, all (Winter Squash)
Blueberries, tame	Peanuts for nuts	Strawberries
Cabbage, all	Pears, all	Sugarcane for sugar
Canola	Peas, dry peas and lentils	Sunflower seed (Sunflowers)
Cherries, sweet	Peas, green	Sweet corn
Corn for grain or seed	Pecans, all	Sweet potatoes
Corn for silage or greenchop	Peppers, bell	Tangerines
Cotton, all	Plums and prunes	Tomatoes (in the open)
Cranberries	Popcorn	Walnuts, English
Figs	Potatoes	Watermelons
Flaxseed (Flax)	Proso millet	Wheat, Winter for grain or seed
Grapefruit	Rice	Wheat, Durum for grain or seed
Grapes	Rye for grain or seed	Wheat, Other spring for grain/seed
Lemons	Safflower	

Source: Compiled from the USDA NASS Organic Production Survey Instrument and USDA RMA 2009 Crop Policies and Pilot Program Lists
*Note: Buckwheat will be included under the insured crops list for crop year 2010.

[31] USDA, NASS, 2009, Organic Production Survey FAQs: What if I want to participate in the survey but didn't get one in the mail?, http://www.agcensus.usda.gov/Surveys/Organic_Production_Survey/FAQs/index11.asp, accessed May, 2009.

TABLE 5. Crops Named in the NASS Organic Production Survey but Not Insured under Named-crop FCIC Programs in 2009*

Beans, snap (fresh)	Garlic
Blackberries and Dewberries	Hazelnuts/Filberts
Broccoli	Herbs, dried
Buckwheat	Herbs, fresh-cut
Cantaloupes and muskmelons	Honeydew melons
Carrots	Lettuce
Cauliflower	Peas, green (fresh)
Celery	Pistachios
Cherries, tart	Raspberries
Dates	Spinach

Source: Compiled from the USDA NASS Organic Production Survey Instrument and USDA RMA 2009 Crop Policies and Pilot Program Lists
*Note: Buckwheat will be included under the insured crops list for crop year 2010.

Historically, organic data have been difficult to collect and assess. Organic production represents a small fraction of the total agricultural production in the United States. Much of the data is proprietary, and in many cases the data provide tools for marketing and market development. Furthermore, organic production is widely scattered across the nation.

The Contractor made exhaustive efforts to gather available organic price data through USDA sources, including NASS, AMS, ERS, and from extension offices and similar state resources. The Contractor also collected additional data from private sources. In developing the protocol for collection of additional data, the Contractor followed the guidelines imposed by the Paperwork Reduction Act on the Government and its contractors. The Contractor conducted an extensive review of academic, trade, and popular literature to glean any appropriate information and identify potential data sources. Internet sources were searched to identify potential data sources and to gain insight into organic practices; the producer and marketing communities; and the economics of organic regulation, production, and marketing. In this context, the Contractor identified resources for an initial data request and instituted a process designed to flow through the organic industry at all levels. The expectation was, due to the integrated nature of the organic community, the data request would reach audiences that could not otherwise be identified.

The Organic Trade Association (OTA)[32] was established in 1985, initially to promote organic food production and eventually to support trade across the organic supply chain. The Contractor worked with OTA to identify potential sources among their membership for organic pricing datasets addressing farm-gate, wholesale, and retail prices. The list of potential data sources included approximately 100 organizations with proprietary organic pricing data. A targeted data solicitation was distributed directly by OTA; the Contractor followed-up with telephone and email reminders about the importance of the project and the data requirements. The data request was forwarded by many of those receiving the request from OTA to additional potential data sources outside the OTA membership. These included producer organizations, extension offices,

[32] Formerly the Organic Foods Production Association of North America.

and other advocacy organizations. The request sought available data on farm-gate and wholesale prices paid to individual producers or groups of producers of organic crops.

The Contractor also worked closely with crop experts, producer organizations, advocacy organizations, consultants, cooperatives, and individuals within the organic community to obtain access to data. Attempts were made to gather data from as many sources as possible. The Contractor is aware of at least one thousand secondary contacts, and has testimony from one producer who supplied data indicating he was a fourth order contact. Interestingly, although he had become aware of the data collection efforts for this RMA study, he was not aware of the Organic Production Survey. The NASS survey instrument had been handled by his son, who also works on the farm.

The Contractor made prospective data sources aware of the scope of the work and the specific data requirements. While the Contractor provided a "model" data submission spreadsheet, the respondents were free to provide information in any format they chose, by email, facsimile transmission, or by mail. These various options were provided to limit delays in submission of material. It was also hoped that by providing alternatives for both the form and delivery mechanism, the task of supplying data would not be perceived as too burdensome. When necessary, the Contractor also made a commitment to limit direct identification of individual producers, buyers, and businesses in the pricing analysis. In general, the organic producers and buyers were supportive of the data collection effort, the process proposed for data collection, and the goal of defining appropriate price elections for insurance of organic crops.

In the following section, the Contractor reports on the data obtained and the sufficiency of those data.

SECTION VI. ORGANIC PRICING DATA REQUIREMENTS AND DATA SUFFICIENCY

As noted earlier, the contract identifies specific requirements for data to be used in the insurance pricing exercises under Section 5.4.2.1. Price Data Criteria. The Contractor was able to identify only one data series from any source that met all the requirements enumerated in that section of the contract.

Sufficiency of Available Government Data

With few exceptions, the organic crop pricing data collected by NASS, AMS, ERS, and by state offices were gathered as an adjunct to data collected for other purposes. Generally, from the perspective of developing insurance price elections, these state and Federal data collections were limited in sampling scope and/or time-frame. One notable exception to the scope limitation is the USDA ERS 2006 Agricultural Resource Management Survey. This survey collected data about the production practices and costs from soybean growers in 19 states. ERS deemed the sample size to be sufficient for statistical reliability.[33] The ERS report provided data on cost of production and returns for 2006 by region and by size of operation for soybeans grown under conventional and organic practices (Appendix D). The results of the ERS study were used extensively in a report on the profitability of organic soybean production in the United States, which reported a farm-gate price premium in 2006 of almost $9 per bushel. This report indicated substantial premiums were offered for the 2007 and 2008 crops as well.[34] While these data meet most of the standards contained in Section 5.4.2.1 of the contract, the data are not available on an annual basis. They present a single comprehensive sampling whose values might be used as a benchmark for alternative pricing approaches, but which by itself cannot be used independently of any other data and thus, do not meet the standards required within the contract.

ERS publishes price series data for farm-gate broccoli (1999-2007) and carrots (1999-2007) as well as wholesale price series for broccoli (1999-2007), carrots (1995-2007), mesclun salad greens prices (1995-2007), and some vegetables (1999-2001, 2005-08), and fruit prices (1993-2001, 2005-08) in Boston and/or San Francisco. Most of the crops documented are not currently insurable under APH or revenue plans, and the series do not identify quantity purchased at the price paid. These data therefore do not meet the requirements set under Section 5.4.2.1. of the contract.

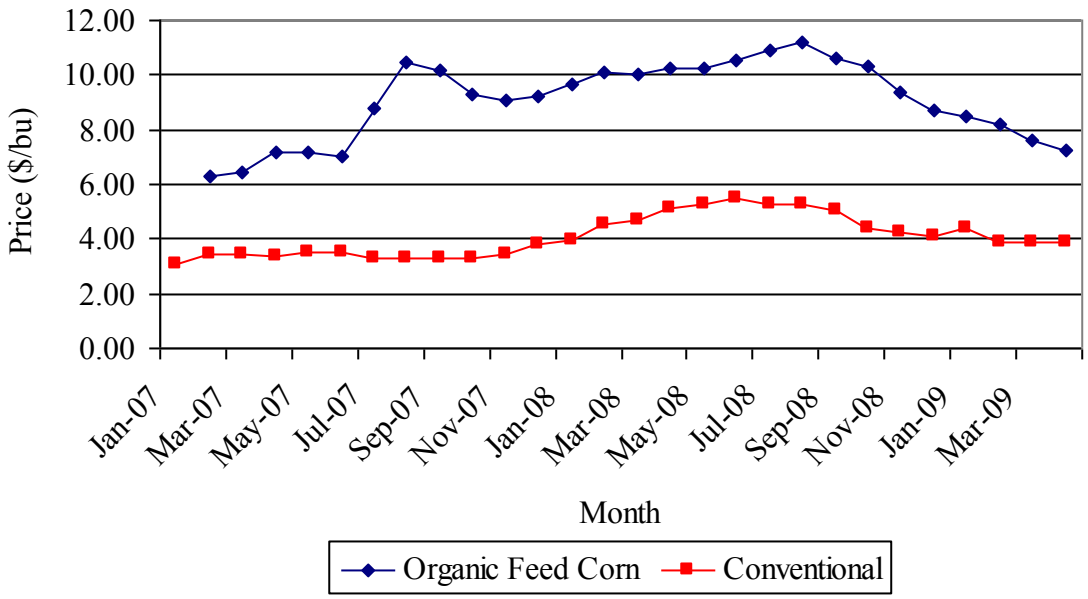
Since early in 2007, the USDA AMS has been reporting organic crop prices for major grains and oilseeds on a biweekly basis (see Appendix E). ERS has reported prices for organically labeled feed-grade barley, corn, oats, peas, rye, and feed-grade wheat, and food and feed grade soybeans for 2007. The Contractor obtained the data underlying this ERS series from the AMS offices that supplied data for the ERS report. Data for an additional 26 months were also available from AMS. These data meet most of the standards outlined under Section 5.4.2.1 of the contract, and since the prices reported are primarily for organic production sold as commodities, the Contractor believes requirement 5.4.2.1.4.3. (i.e., [the dataset] provides the necessary information that allows prices to be adjusted to the farm-level) is met. However, it is important to

[33] USDA, ERS, 2008, Briefing Rooms: Organic Agriculture, http://www.ers.usda.gov/Briefing/Organic/, accessed March, 2009.
[34] McBride, W.D. and C. Greene, 2008, The Profitability of Organic Soybean Production, presented at American Agricultural Economics, Orlando, Florida, http://ageconsearch.umn.edu/bitstream/6449/2/465035.pdf, accessed April, 2009

note the data supplied to the Contractor did not identify quantity purchased at the price paid and thus, does not meet the requirements in Section 5.4.2.1 of the contract.

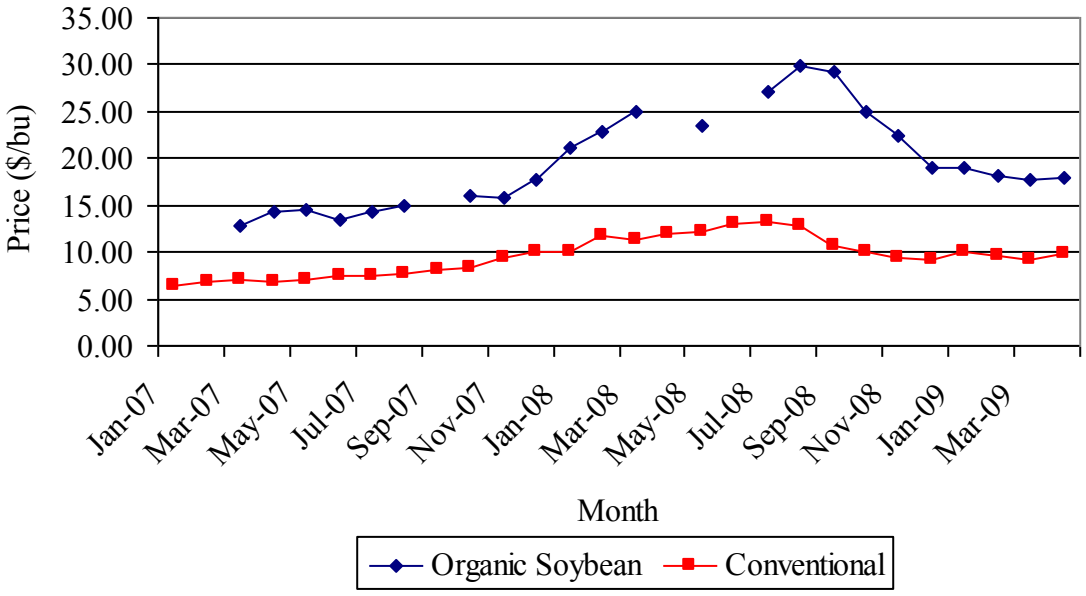
Of the crops for which AMS has collected data, corn provides the most complete dataset. Figure 2 presents the organic pricing data for corn, as reported by AMS on a weekly basis, aggregated to a monthly basis.

FIGURE 2. Conventional and Organic Corn Prices 2007 through 2009



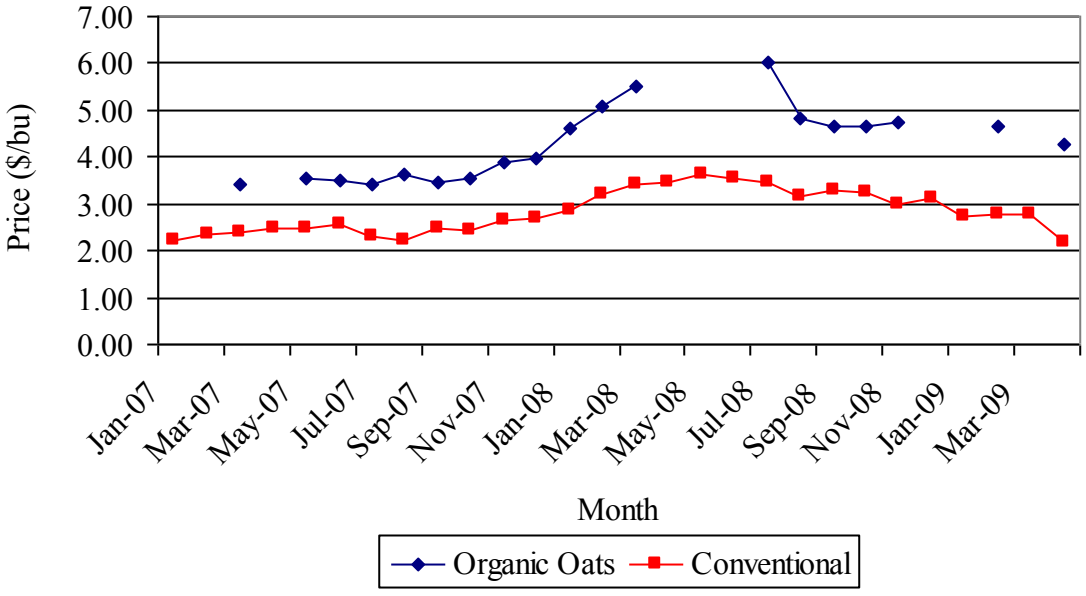
Although this dataset covers only a brief period of time, the data are available from a credible USDA agency source, and are expected to be maintained going forward. Figures 3, 4, 5, and 6 display reported AMS prices for organic soybeans, oats, feed-grade barley, and feed-grade wheat respectively.

FIGURE 3. Conventional and Organic Soybean Prices 2007 through 2009[35]



included on the figure.
Source: Data compiled by the Contractor from AMS weekly Midwest Organic Price Reports. (Figure 3 Data)

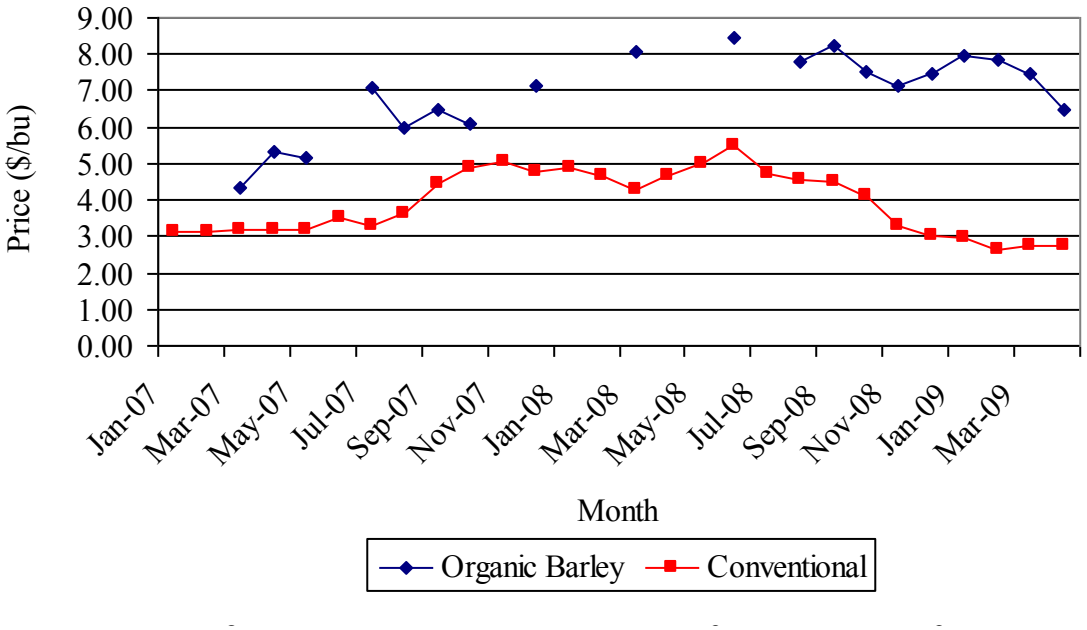
FIGURE 4. Organic Oat Prices 2007 through 2009



included on the figure.
Source: Data compiled by the Contractor from AMS weekly Midwest Organic Price Reports. (Figure 4 Data)

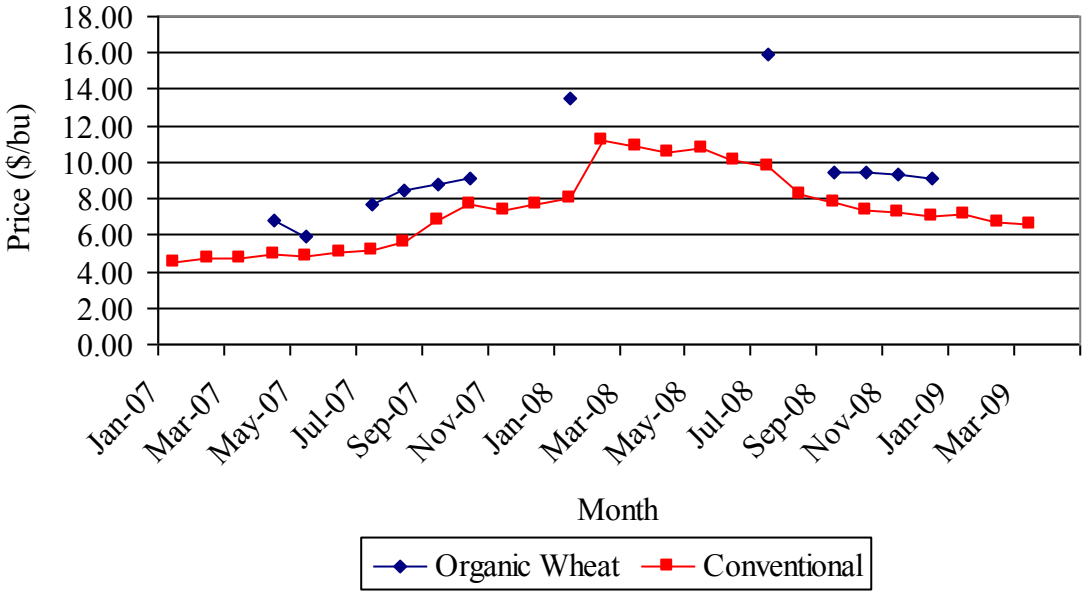
[35] The prices reported are applicable to feed-grade soybeans. Anecdotal evidence suggests much greater premiums for food-grade organic soybean varieties, particularly those used for soy-milk, tofu, and edamame.

FIGURE 5. Conventional and Organic Feed-Grade Barley Prices 2007 through 2009



included on the figure.
Source: Data compiled by the Contractor from AMS weekly Midwest Organic Price Reports. (Figure 5 Data)

FIGURE 6. Conventional and Organic Feed-grade Wheat Prices 2007 through 2009[36]



included on the figure.
Source: Data compiled by the Contractor from AMS weekly Midwest Organic Price Reports. (Figure 6 Data)

[36] AMS changed the basis of reporting wheat prices in 2008, breaking wheat out in the hard red and soft red categories. Prices reported from January 2007 through March 2008 reflect a generic "wheat" category. Prices reported from March 2008 through April of 2009 reflect Hard Red Wheat.

Note that while the data for corn and soybeans were reliably and consistently reported throughout the data collection period, the consistency of the data reporting falls sharply for oats, feed-grade barley, and particularly for feed-grade wheat. In discussions with AMS personnel, the Contractor has learned the markets for organic small grains are thin and that participation in price reporting has been less consistent than the level AMS had expected. However, the reporting has improved recently, and this may be indicative of improved data availability in future reports.

Few of the state data identified by the Contractor met the ~~"a~~available on an annual basis to RMA" standard outlined under Section 5.4.2.1. of the contract. Like much of the Federal data, state-level data on organic pricing were collected as an adjunct to the collection of other data. Two notable exceptions to this pattern are the direct to consumer pricing data from Maine (Appendix F, Exhibits 1-3) and Wisconsin (Appendix F, Exhibit 4). Extension offices in these states made substantial efforts to collect pricing data to support direct retail and wholesale sales from their organic producers. Data are available from Maine for 2006 through 2008. Data are available from Wisconsin for 2004 through 2008. While these data represent the best aggregate retail data obtained for organic production, neither dataset takes into account the quantity sold and the sample numbers are not likely to represent a substantial fraction of organic producers in the state, although they may represent an appropriate sample at the county level. The data from state datasets, including the data from Maine and Wisconsin, therefore do not meet the requirements set under Section 5.4.2.1. of the contract.

Public-Private Partnership Data Sufficiency

RMA partnerships support development of educational and risk management tools for agricultural producers. The Rodale Institute-RMA partnership project has gathered price data for organic and conventional products. These included data for commodity and specialty crops. Under the partnership, the price data are made available to assist producers in assessing market and production risks.

The Rodale Institute-RMA partnership data, with approximately 130,000 price entries for organic and conventional crops, represent a substantial resource for analysis of wholesale and commodity organic prices by market, season, and crop (Table 6 and Appendix G). While the data collected under the Rodale Institute-RMA partnership are publicly available from wholesalers and commodity markets, gathering the data by weekly and monthly surveys is time consuming. Unless the collection and management of these data is administered under contract (perhaps under an extension of the existing partnership agreement), collection of future data will constitute a substantial administrative burden for the agency.

The limitation with regard to the Rodale Institute-RMA partnership data is the prices are not coupled with quantity sold at each price. The partnership data therefore do not meet the requirements set under Section 5.4.2.1. of the contract. However, for some organic crops, the historic pattern of reported prices in the partnership data series covers a long period and data from alternative sources (i.e., AMS, ERS, NASS) show patterns reflecting those observed in the partnership data time series.

TABLE 6. Rodale Institute-RMA Partnership Crops[37]

Crop	First Report	Last Report	Number of Observations
Apples: Ambrosia	10/14/2004	3/19/2007	79
Apples: Fuji	10/14/2004	3/24/2009	1,322
Apples: Gala	10/14/2004	3/24/2009	1,581
Apples: Golden Delicious	2/20/2003	3/24/2009	1,593
Apples: Granny Smith	10/14/2004	3/24/2009	1,373
Apples: Red Delicious	10/14/2004	3/24/2009	1,569
Artichoke	10/19/2004	3/24/2009	1,167
Asparagus	10/19/2004	3/24/2009	1,594
Avocado: Hass	10/25/2004	3/24/2009	1,774
Barley: Feed	10/19/2004	3/26/2009	1,045
Barley: Malting	10/19/2004	2/27/2009	605
Basil	9/30/2003	3/24/2009	1,707
Beans, White Navy	8/16/2004	8/16/2004	1
Beef (retail)	2/21/2003	12/20/2004	376
Blueberries	2/20/2003	3/24/2009	1,649
Bok Choy	10/25/2004	3/24/2009	943
Broccoli	3/5/2003	3/24/2009	2,463
Butter (retail)	2/21/2003	12/20/2004	376
Cabbage, Green	10/19/2004	3/24/2009	1,368
Cantaloupe	2/20/2003	3/24/2009	1,781
Carrots	3/5/2003	3/24/2009	2,330
Cauliflower	10/19/2004	3/24/2009	2,042
Celery	3/5/2003	3/24/2009	2,218
Cherries	6/24/2003	12/14/2004	36
Chicken (retail)	2/21/2003	12/20/2004	376
Chives	9/30/2003	3/24/2009	1,371
Cilantro	9/30/2003	3/24/2009	644
Corn, #2 Yellow	2/21/2003	3/26/2009	3,664
Corn, White	8/10/2004	10/18/2004	10
Cucumber	10/19/2004	3/24/2009	764
Dill	9/30/2003	3/24/2009	1,391
Eggs (retail)	2/21/2003	12/20/2004	376
Garlic: Super Col	3/5/2003	3/24/2009	1,690
Grapefruit: Ruby	2/20/2003	3/24/2009	1,925
Grapes: Thompson	2/20/2003	3/24/2009	1,321
Green Beans	3/5/2003	3/24/2009	1,795
Kumquat	3/15/2007	3/19/2007	20
Lemon	10/14/2004	3/24/2009	1,758
Lettuce: Butterleaf	3/10/2003	3/24/2009	1,035
Lettuce: Greenleaf	3/5/2003	3/24/2009	2,700
Lettuce: Head	10/19/2004	3/19/2009	1,273
Lettuce: Mesclun	10/19/2004	1/5/2005	21
Lettuce: Red Leaf	10/25/2004	3/24/2009	2,105
Lettuce: Romaine	3/5/2003	3/24/2009	2,681
Marjoram	10/15/2003	3/24/2009	1,493

[37] The Rodale Institute-RMA partnership is continuing to collect price data but the last report noted was the last report transmitted to the Contractor.

TABLE 6. Rodale Institute-RMA Partnership Crops – Continued

Crop	First Report	Last Report	Number of Observations
Milk (retail)	2/21/2003	12/20/2004	376
Mushroom: Portabella	10/19/2004	3/24/2009	2,058
Mushroom: Shiitake	10/19/2004	3/24/2009	1,327
Oats: Feed Grade	2/21/2003	3/26/2009	1,801
Oats: Food Grade	2/21/2003	9/10/2008	326
Onions, Green	3/5/2003	3/24/2009	2,211
Onions, White Med	10/25/2004	3/24/2009	562
Onions, Yellow Med	10/25/2004	3/24/2009	1,157
Oranges: Valencia	2/20/2003	3/24/2009	1,568
Oregano	9/30/2003	3/24/2009	1,670
Parsley	8/16/2004	3/24/2009	512
Peaches	5/13/2003	1/23/2007	278
Pears: Bartlett	10/14/2004	3/24/2009	968
Pears: Bosc	10/14/2004	3/24/2009	1,143
Pears: Danjou	2/20/2003	3/24/2009	1,818
Peas: Snow	10/19/2004	3/24/2009	1,545
Peppermint	9/30/2003	1/15/2009	388
Peppers: Bell, Green Med	3/5/2003	3/24/2009	1,956
Peppers: Bell, Yellow, Med	10/19/2004	3/24/2009	999
Peppers: Jalapeno	10/19/2004	3/24/2009	1,129
Plums: Black	2/20/2003	12/30/2008	699
Pork (retail)	2/21/2003	12/20/2004	376
Potato: Red A	10/19/2004	3/24/2009	2,095
Potato: Yellow A	3/10/2003	3/24/2009	738
Potato: Yukon Gold Baker A	10/19/2004	3/24/2009	1,807
Potatoes: Russet	3/5/2003	3/24/2009	2,205
Radish	10/20/2004	3/24/2009	1,518
Raspberries	2/20/2003	3/24/2009	1,930
Rosemary	9/30/2003	3/24/2009	1,749
Sage	9/30/2003	3/24/2009	1,702
Sorrel	9/30/2003	3/24/2009	1,178
Soybeans: Feed Stock	2/21/2003	3/26/2009	3,255
Soybeans: Tofu Type	2/21/2003	3/26/2009	1,787
Spearmint	10/6/2003	3/24/2009	617
Spinach	3/5/2003	3/24/2009	2,553
Squash, Winter: Acorn	10/19/2004	3/24/2009	1,875
Squash, Winter: Butternut	10/19/2004	3/24/2009	1,807
Squash, Winter: Spaghetti	10/19/2004	3/24/2009	1,829
Strawberries	2/20/2003	3/24/2009	2,294
Tarragon	9/30/2003	3/24/2009	1,694
Thyme	9/30/2003	3/24/2009	1,734
Thyme, Lemon	11/2/2004	1/15/2009	449
Tomatoes	3/5/2003	3/24/2009	1,794
Watermelon, Red flesh seedless	2/20/2003	3/24/2009	849
Wheat: Hard Red	2/21/2003	3/26/2009	2,610
Zucchini	3/10/2003	3/24/2009	2,311

Source: Compiled from the Rodale Institute-RMA partnership dataset.

Private Data Sufficiency

Collectively, the private data collected represent more than 100 crops (Tables 7 and 8). With the exception of grains, the pricing obtained from private sources is primarily for wholesale pricing arrangements. The grain price reports reflect aggregate commodity market sales.

TABLE 7. U.S. Organic Produce Crops for which Wholesale Pricing Data are Available

Crop	Years	Crop	Years	Crop	Years	Crop	Years
Aloe	2005-2007	Cilantro	2004-2009	Leeks	2004-2009	Persimmons	2005-2009
Apples	2004-2009	Coconuts	2005-2009	Lemons	2004-2009	Pineapples	2004-2009
Apricots	2004-2009	Collards	2004-2009	Lettuce	2004-2009	Plums	2004-2009
Apriums	2005-2008	Corn (sweet)	2004-2009	Limequat	2008-2009	Pomegranates	2005-2009
Artichokes	2004-2009	Cucumbers	2004-2009	Limes	2004-2009	Potatoes	2004-2009
Arugula	2004-2009	Daikon	2004-2009	Mandarin Oranges	2004-2009	Radicchio	2005-2009
Asparagus	2005-2009	Dates	2004-2009	Mangos	2004-2009	Radish	2004-2009
Avocados	2004-2009	Dill	2004-2009	Melons	2004-2009	Rhubarb	2004-2009
Banana	2005-2009	Eggplant	2004-2009	Mushrooms	2005-2009	Rutabaga	2005-2009
Beans (fresh)	2004-2009	Endive	2005-2009	Mustard	2004-2009	Spinach	2004-2009
Beets	2004-2009	Escarole	2004-2009	Nectarines	2004-2009	Squash (summer)	2004-2009
Bok Choy	2004-2009	Fennel	2004-2009	Okra	2005-2009	Squash (winter)	2004-2009
Broccoli	2004-2009	Figs	2004-2009	Onions	2004-2009	Starfruit	2006-2007
Broccolini	2008-2009	Garlic	2004-2009	Oranges	2004-2009	Jerusalem Artichokes	2005-2009
Brussels Sprouts	2004-2009	Ginger	2004-2009	Papaya	2004-2009	Tamarillo, Red	2005-2009
Cabbage	2004-2009	Grapefruit	2004-2009	Parsley	2004-2009	Tangelos	2005-2009
Carrots	2004-2009	Grapes	2004-2009	Parsley Root	2005-2008	Tangerines	2008
Cauliflower	2004-2009	Horseradish	2005-2009	Parsnips	2005-2009	Tomatillo	2004-2009
Celery	2004-2009	Jicama	2005	Passion Fruit	2005-2009	Tomatoes	2004-2009
Chard	2004-2009	Kale	2004-2009	Peaches	2004-2009	Turmeric	2004-2009
Cherimoya	2005-2009	Kiwifruit	2004-2009	Pears	2004-2009	Turnips	2005-2008
Cherimoya	2009	Kohlrabi	2004-2009	Peas	2004-2009	Watercress	2004-2009
Cherries	2004-2009	Kumquat	2004-2009	Peppers	2004-2009	Yams	2004-2009

Source: Compiled from the private wholesale datasets provided for this study by wholesalers, producer cooperatives, and advocacy groups.

TABLE 8. U.S. Organic Grain Crops for which Market Pricing Data are Available[38]

Crop	First Record	Last Record	Notes
Barley			
Milling Grade	1997	2007	intermittent
Feed Grade	1997	2007	
Beans, Dry			
Navy	2006	2007	
Black Turtle	2006	2007	
Pinto Beans	2006	2007	
Dark Red Kidney	2006	2007	
Corn			
Food Grade #1 Yellow	1997	2007	intermittent
Feed Grade #2 Yellow	1997	2007	intermittent
Popcorn-Yellow	2006	2007	
Blue	2006	2007	
White	2006	2007	
Oats			
Feed Grade	2006	2007	
Food Grade	2006	2007	
Hulless	2006	2007	
Soybeans			
Food Grade Vinton	1997	2007	intermittent
Food Grade Iowa Types	1997	2007	intermittent
Food Grade Clear Hylum		2007	
Wheat			
Feed Grade #2 or Screenings	1997	2007	intermittent
HR Winter #2 12% Protein	2006	2007	
SR Winter #2	2006	2007	
SW Winter #2	2006	2007	
HW Winter #2	2006	2007	
HR Spring #2	2006	2007	
Low Protein	2006	2007	
Other			
Buckwheat	2006	2007	
Flax, Golden-Food Grade	2006	2007	
Flax, Brown-Food Grade	2006	2007	
Millet per pound	2006	2007	
Peas, Field for Feed	2006	2007	
Rye 56# Bushel	2006	2007	
Spelt-Food Grade 11% Protein	2006	2007	
Sorghum for Grain (Milo)	2006	2007	
Sunflowers	2006	2007	

Source: Compiled from the datasets provided for this study by wholesalers, producer cooperatives, and advocacy groups.

[38] The last report represents the last year for which prices were provided in the datasets collected.

The nature of the organic agricultural enterprises has an impact on the data available from year to year. Many producers grow a wide variety of crops. Crop rotations are an important element of organic farming. On smaller operations, specific crops produced are likely to change from year to year. In a number of regions, finding a market for some of the rotational crops is particularly challenging; consequently fallow periods may be more frequent than under conventional practices, and some plantings may be used as "green manure." On a single operation, some crops are sold on the open market, while others are sold under contract (which appears to be the preferred pricing arrangement).[39]

In most cases, the private datasets document pricing for more than one producer, crop, season, or pricing arrangement. These were primarily open market prices. In relatively few cases, the data obtained were much more limited, with a few producers providing data for themselves documenting a single crop, season, and pricing arrangement. It was not clear whether sales reported under this scenario were open market or contract prices. In at least one case, a producer reported receiving higher prices under contract than he would have obtained in an open market sale for one organic corn variety, and a lower price for a second variety.

The private datasets generally do not pair quantity sold with prices realized. Therefore data from most private data sources do not meet the requirements set under Section 5.4.2.1. of the contract. The two notable exceptions to this pattern are data obtained for organic cotton and Florida citrus.

Organic Cotton: The U.S. harvest of organic cotton represents a small fraction of total global organic production, with Turkey, China, and India producing the vast majority of the crop.[40] Nonetheless, the pricing data the Contractor obtained for organic cotton production in the United States are particularly robust (Table 9 and Appendix H). In 2007, U.S. producers planted organic cotton on a total of 8,510 acres and harvested 14,025 bales of cotton. Both represented substantial increases over 2006 production. Although the total number of bales of organic cotton harvested each year varies substantially, it appears the data collected capture between 50 and 75 percent of the total U.S. organic cotton production, and may represent as much at 85 percent of the production in some years.[41] All the cotton reported in this series was sold into the open market through a marketing cooperative. Matching conventional data by producer are not available from the same source. However, the pricing structure in the market for conventional cotton can be used to develop such a series. Since the organic cotton series is longer and more complete than most others and structured to match prices to quantity sold, the data for cotton meet the requirements set under Section 5.4.2.1. of the contract. The cooperative providing the data is interested in obtaining appropriate pricing for their insurance. The data can be validated through purchase and sales agreements between the cooperative and producers and buyers, respectively.

[39] Unanimous testimony from five organic producers and two marketing cooperatives concerning their pricing arrangements.
[40] Organic Trade Association, 2008, Organic Cotton Facts, http://www.ota.com/organic/mt/organic_cotton.html, accessed April, 2009.
[41] Anonymous producer, personal communication, April, 2009.

TABLE 9. 1993-2008 U.S. Organic Cotton Production for which Pricing Data are Available

Year	FSA Farms	Production				Price		
		Total (lbs.)	by lot	by location	includes transitional	by lot	by location	includes transitional
2008	58	3,635,061						
2007	57	7,336,854	yes		yes	yes		yes
2006	49	2,951,388	yes		yes	yes		yes
2005	46	4,145,895	yes		yes	yes		yes
2004	35	2,640,500	yes		yes	yes		yes
2003	28	1,224,158	yes		yes	yes		yes
2002	40	2,932,351	yes		yes	yes		yes
2001	38	2,447,304	yes		yes	yes		yes
2000	35	1,544,638	yes		yes	yes		yes
1999	46	3,087,223	yes		yes	yes		yes
1998	30	2,131,508	yes		yes	yes		yes
1997	32	1,713,532	yes		yes	yes		yes
1996	30	1,912,311		yes	yes		yes	yes
1995	40	1,603,713		yes	yes		yes	yes
1994	32	1,876,039		yes	yes		yes	yes
1993	53	3,218,543		yes	yes		yes	yes

Source: Cooperative and producer organization sales records.

Wholesale Organic Produce: The Contractor obtained an organic data series for produce from a major wholesaler which couples the weighted average wholesale price for a wide variety of crops with the total quantity sold for each crop. While this dataset is impressive and represents a substantial portion of U.S. wholesale organic produce sales, two barriers stand in the way of using these data for development of price elections through traditional price analysis. First, the aggregation of pricing and weighting of the prices cannot be independently verified. Second, since the data are proprietary, they may not be available to RMA on an annual basis unless specific arrangements can be established. Furthermore, for many crops there are few data to allow an extrapolation of wholesale prices to prices realized at the farm-gate. For each crop, there are unique post-harvest elements (e.g., cleaning, sorting, packaging, and transportation) that must be addressed in establishing the relationship between wholesale and farm-gate prices and there are limited resources to establish this relationship. While it is challenging to calculate the value of post-harvest costs for some crops, for the major commodity crops there are sufficient reports of cost of production to develop appropriate estimates of post-harvest value added. For these major commodity crops, value-added components tend to be quite similar regardless of the production practices.

Organic Citrus: In the case of organic citrus fruits, it may be possible to bridge between wholesaler data; the Rodale Institute-RMA partnership dataset; and a second, limited wholesale dataset supplied by a producer/packer. The producer/packer data couple aggregate annual pricing and quantity sold for a wide variety of organic citrus markets (Tables 10 and 11 and Appendix I) for the most recent two crop seasons. The data from this dataset represent about $2,000,000 in citrus fruit sales each year. The wholesaler data provides weighted aggregate pricing and quantity data nationally for grapefruit, lemons, limes, oranges, tangelos, and tangerine fruits, generally from 2004 through 2008. The Rodale Institute-RMA partnership data for citrus documents patterns in market prices and includes pricing for conventional and organic

production from the same sources. Collectively, these data have the elements necessary to conduct a pricing analysis.

TABLE 10. 2007-2008 Florida Organic Citrus Fruit Sales for Fifteen Producers

2007-2008 Lake County, Florida Organic Citrus Sales

Crop	Quantity sold (lbs)	Price per Pound	Total Sales ($)
Hamlin Orange	416,920	0.54	225,345
Valencia Oranges	760,760	0.52	395,785
Ambersweet Orange	52,520	0.54	28,282
Cara Cara Navel	5,720	0.55	3,146
Navel Orange	62,840	0.57	35,740
Red Grapefruit	182,560	0.88	160,059
White Grapefruit	11,880	0.71	8,479
Sunburst Tangerine	360,000	0.63	226,170
Honey Tangerine	83,840	0.77	64,284
Orlando Tangelo	75,880	0.54	40,691

Source: Compiled from packer records for 15 producers

TABLE 11. 2008-2009 Florida Organic Citrus Fruit Sales for Fifteen Producers[42]

2008-2009 Lake County, Florida Organic Citrus Sales

Crop	Quantity sold (lbs)	Price per Pound	Total Sales ($)
Hamlin Orange	483,440	0.50	243,654
Valencia Oranges	204,400	0.55	113,238
Ambersweet Orange	62,280	0.56	34,674
Cara Cara Navel	10,080	0.29	2,961
Navel Orange	225,200	0.62	138,611
Red Grapefruit	205,560	0.84	172,927
White Grapefruit	12,880	0.63	8,050
Sunburst Tangerine	576,880	0.66	378,433
Honey Tangerine	33,840	0.75	25,245
Robinson Tangerine	38,800	0.70	27,335
Fallglow Tangerine	9,680	0.75	7,260
Orlando Tangelo	77,920	0.35	27,136

Source: Compiled from packer records for 15 producers

Since Florida citrus fruit is insured under dollar plans of insurance, it is not clear how the organic citrus data described herein could be used since the dollar amounts of insurance under those plans normally are based on production costs, not market valuations. It is not clear that the market valuation implicit in these data provides any insight into production costs. Hence, the Contractor concludes these data do not meet the requirements stated in Section 5.4.2.1. of the contract.

[42] These data are likely incomplete, particularly for some varieties as they were compiled shortly before the end of the traditional harvest season.

Retail Pricing Data

While substantial efforts were made to collect retail pricing data for organic crops, reports on retail data were sporadic and primarily anecdotal. All the price data collected by the Contractor, including retail price data, reveal a premium for the organic crop prices on an annual basis relative to the conventional counterparts. Further complicating the collection of these data, pricing arrangements for retail organic sales are even more volatile than those for commodity and wholesale sales. Organic producers at farmers' markets have been known to forego premiums, especially in markets where organic producers are poorly represented. In 2006, as much as 40 percent of organic retail sales of produce in farmer's markets may have been made without premium.[43] The Contractor found no similar documentation of farm-gate or wholesale sales. While, the retail price for the produce may have substantially exceeded the commodity price for produce sold to processors/wholesalers, the Contractor could identify no data to establish the relationship of retail prices to farm-gate prices. The wide variety of post-harvest processes involved in preparing organic crops for retail sales introduces one significant barrier to the use of retail price reports for establishing crop insurance prices under the Act. The variety of mechanisms to collect retail data and the inconsistencies in the collection processes from time to time and location to location also create insurmountable issues in using retail price report data to develop price elections. Consequently, the retail prices identified by the Contractor do not meet the requirements set under Section 5.4.2.1. of the contract.

Price Factors

While direct estimation of organic prices may be feasible for one or more data-rich organic crops, estimating value based on historical price relationships provides the potential for expanding offerings of organic prices to a much wider array of crops in an administratively feasible and economically defensible manner. The resources needed to support this approach are significantly smaller than required for independent estimation, and likely will be more robust. The Contractor considered three different mechanisms for applying pricing factors to conventional price elections, two which explore crops individually (an additive and a multiplicative mechanism), and one which considers the application of price election factors to crop categories.

The Contractor notes that the only crops available for comparisons often represent production for direct use by consumers (organic) versus industrial use (commodity). That is, commodity corn is refined to produce ethanol, high fructose corn syrup, dextrose, starch and other products, and to feed livestock in confined feeding operations (industrial use). Organic corn is more likely to be utilized in products such as snacks and other high value products or in feeding organic livestock. Thus, the premiums for organic product as indicated by available data for grains and oilseeds are unlikely to apply precisely to fruits, vegetables, and similar crops.

Both organic and conventional time series data are needed to consider and analyze pricing relationships. It may be reasonable to consider relationships broadly (i.e., not just at the farm-gate) in adjudging the relationships between prices realized at the farm for conventional and organic production.

[43] Kremen, A., C. Greene, J. Hanson, 2006, Organic Produce, Price Premiums, and Eco-Labeling in U.S. Framer's Markets, in Organic Agriculture in the U.S., A.J. Wellson, ed., Nova Publishers, Hauppauge, NY, pp. 55-70.

SECTION VII. RECOMMENDATIONS

Under Contract AG-645S-C-09-0003, the Contractor was to find and assess whether sufficient data exists that is consistent with price data standards utilized by RMA and to research pricing arrangements of organic commodities. The Contractor was charged with identifying and evaluating currently available organic price data based on specific criteria enumerated in Section 5.4.2.1 of the contract. Specifically, the Contractor was required to determine crops for which data are available that are ~~"c~~redible, reliable, and available on an annual basis to RMA." Any farm-level data must include ~~"t~~he amount or quantity sold associated with the price, the method of sale (contract or open market) and location documented with the price; and contractual arrangement." Any aggregate data must ~~"b~~e verifiable by a disinterested third party, whenever possible" and will be ~~"a~~cceptable if buyer prices are aggregated to protect buyer identity as long as supplementary buyer information supports active participation in the market, and if it provides the necessary information that allows prices to be adjusted to the farm-level." To this end, the Contractor collected extensive public, private, and public-private partnership datasets, including over 100 crops over as many as 15 historical years.

The datasets collected by the Contractor were analyzed, summarized, and assessed based on the Section 5.4.2.1 criteria. With the exception of the data for organic cotton, the data collected by the Contractor do not meet all the sufficiency criteria. However, the contract states in the scope of work: ~~"I~~n addition to the existence of data from an acceptable data source, RMA considers several factors to determine if the data available is appropriate which includes, but is not limited to; (1) prices coupled with per unit quantity sold, (2) quality of the data, and (3) reliability of the data source." Therefore, based on the Contractor's research, and assuming the RMA requirements for quantity sold at a price are relaxed, USDA AMS data of sufficient quality are also available to support development of organic price elections for corn and soybean.

It should be noted the price series for certified organic production reveal a premium for the organic crop prices relative to the conventional counterparts. While the price premiums vary through time, and especially among crops, its persistent presence and financial impact are evident. The current pricing approach for insurance, valuing organic production at conventional prices, creates a number of issues with the incentives for crop insurance participants. Participation by organic producers may be limited. Producers may insure at a higher coverage level to obtain an appropriate liability. Producers may be underinsuring their crop to obtain an appropriate coverage level. Any improvements in organic price elections would improve the efficacy of the crop insurance program for organic crops. It is worth noting price elections have no impact on the actuarial soundness of the program. However, since they are used to scale liability, the Contractor understands the importance placed on assuring pricing estimates are reasonable and based on sound analyses supported by appropriate data. Since only one of the available datasets for crops fully meets the Section 5.4.2.1 criteria, and therefore the other datasets cannot be used for a precise analysis of pricing for insurance, the Contractor recommends RMA consider relaxing the data sufficiency requirements outlined in the contract. Especially for major commodity crops, the requirement that prices be linked to quantity sold at the price may be restrictive. At the least, RMA could consider using the lowest price reported in a crop year. Although this would be a very conservative approach, the price election would generally reflect the value of the organic crop better than a conventional price.

One alternative would be to establish organic price elections using alternative price election procedures based on –organic price factors" where data can support a reasonable measure of confidence. Estimating value based on historical price relationships provides the potential for expanding offerings of organic prices to a much wider array of crops in an administratively feasible and economically defensible manner. The resources needed to support this approach are significantly smaller than required for independent estimation, and likely will be more robust. Both organic and conventional time series data are needed to consider and analyze pricing relationships. It may be reasonable to consider relationships broadly (i.e., not just at the farm-gate) in adjudging the relationships between prices realized at the farm for conventional and organic production.

A second alternative would be a contract production pricing approach where data can support a reasonable measure of confidence. As noted earlier, RMA allows producers of several crops to establish a price election by using the base contracted price, sometimes controlled by a cap. Thus, any crop for which RMA already permits establishing the price election via a base contract price AND that is grown organically may already have the appropriate premium in the price at which the guarantee is valued and indemnities are computed. This approach could be implemented broadly with minimal underwriting constraints.

Prices developed under either of these approaches are likely to be less precise than prices developed with data meeting all Section 5.4.2.1 criteria, and therefore will likely fall short of producers' expectations based on their on-farm experience. However, these prices are likely to be more acceptable to producers than the current price elections.

Finally, since crops grown on transitional acreage cannot be labeled as organic and are generally sold into the conventional market, the Contractor recommends the price election for insurance of these transitional crops continue to be those used for crops grown under conventional practices.

Appendix A

Census of Agriculture State Level Table 43, Organic Agriculture 2007

This information is available at:
http://www.agcensus.usda.gov/Publications/2007/Full_Report/usv1.pdf

Appendix B

2008 Organic Production Survey

Exhibit 1

Survey Instructions

This information is available at:
http://www.agcensus.usda.gov/Surveys/Organic_Production_Survey/Instruction_Sheet.pdf

Exhibit 2

Survey Form

This information is located at:
http://www.agcensus.usda.gov/Surveys/Organic_Production_Survey/organics_reportform.pdf

Appendix C

Recent Patterns in Federal Insurance of Organic Crops*

* RMA Summary of Business data for 2008 were not available in time to be incorporated into these tables for the draft report. Values for 2008 will be included in the final report.

TABLE C1. Number of Counties with Insured Organic Crops, by State and Year

State	State FIPS	2004	2005	2006	2007
Alaska	02	1			
Arizona	04		1	1	2
Arkansas	05				1
California	06	7	24	28	31
Colorado	08	8	15	15	14
Florida	12		4	7	6
Georgia	13			1	5
Hawaii	15		1	1	1
Idaho	16	2	4	5	12
Illinois	17	13	20	21	19
Indiana	18	3	3	7	4
Iowa	19	45	47	52	58
Kansas	20	8	15	16	21
Maine	23	2	2	2	2
Maryland	24	1	1	1	1
Massachusetts	25		2	3	3
Michigan	26	11	13	19	23
Minnesota	27	43	50	54	61
Missouri	29	6	10	10	9
Montana	30	11	16	16	18
Nebraska	31	24	26	30	32
New Jersey	34			1	1
New Mexico	35			2	2
New York	36	7	7	8	9
North Carolina	37		1	1	3
North Dakota	38	24	26	29	30
Ohio	39	8	10	10	20
Oklahoma	40		1	1	1
Oregon	41		5	9	11
Pennsylvania	42		3	3	5
South Dakota	46	10	12	18	21
Texas	48	11	15	16	21
Utah	49	1	3	3	3
Vermont	50	1	1	2	4
Virginia	51	1	6	8	8
Washington	53	3	11	10	10
Wisconsin	55	25	30	36	43
Wyoming	56	2	4	4	4

TABLE C2. Number of Insured Organic Crops, by State and Year

State	State FIPS	2004	2005	2006	2007
Alaska	02	1			
Arizona	04		2	2	3
Arkansas	05				1
California	06	2	22	31	32
Colorado	08	6	9	8	7
Florida	12		4	7	8
Georgia	13			1	4
Hawaii	15		1	2	2
Idaho	16	3	5	4	5
Illinois	17	4	5	3	5
Indiana	18	2	3	2	2
Iowa	19	3	3	6	4
Kansas	20	5	6	6	8
Maine	23	1	1	2	3
Maryland	24	2	1	2	2
Massachusetts	25		1	1	1
Michigan	26	6	10	11	11
Minnesota	27	10	11	11	14
Missouri	29	2	5	4	4
Montana	30	5	6	4	5
Nebraska	31	7	8	9	9
New Jersey	34			2	2
New Mexico	35			2	2
New York	36	6	5	8	6
North Carolina	37		1	1	3
North Dakota	38	12	13	12	13
Ohio	39	2	4	4	3
Oklahoma	40		1	2	1
Oregon	41		5	12	12
Pennsylvania	42		1	2	3
South Dakota	46	7	9	8	9
Texas	48	5	8	8	10
Utah	49	1	3	3	4
Vermont	50	1	1	1	1
Virginia	51	1	3	4	5
Washington	53	5	14	14	15
Wisconsin	55	8	10	11	11
Wyoming	56	2	6	4	7

TABLE C3. 2006 Organic Crops Insured Under FCIC Plans of Insurance

2006 Organic Crops Insured Under FCIC Plans of Insurance	
Almonds	Hybrid Corn Seed
Apples	Lemons
Avocados	Macadamia Nuts
Barley	Macadamia Trees
Blueberries	Mandarins
Cherries	Millet
Citrus I	Mineola Tangelos
Citrus II	Mustard
Citrus III	Navel Oranges
Citrus IV	Oats
Citrus Trees I	Onions
Citrus Trees IV	Orlando Tangelos
Citrus Trees V	Peaches
Citrus VII	Peanuts
Corn	Pears
Cotton	Plums
Cranberries	Popcorn
Cultivated Wild Rice	Potatoes
Dry Beans	Processing Apricots
Dry Peas	Processing Beans
Figs	Processing Cling Peaches
Flax	Prunes
Flue Cured Tobacco	Raisins
Forage Production	Safflower
Forage Seeding	Soybeans
Fresh Apricots	Strawberries
Fresh Freestone Peaches	Sunflowers
Fresh Market Tomatoes	Sweet Corn
Fresh Nectarines	Table Grapes
Grain Sorghum	Tomatoes
Grapefruit	Valencia Oranges
Grapes	Walnuts
Green Peas	Wheat

TABLE C4. 2005 Organic Crops Insured Under FCIC Plans of Insurance

2005 Organic Crops Insured Under FCIC Plans of Insurance	
Alfalfa Seed	Grapes
Almonds	Green Peas
Apples	Hybrid Corn Seed
Barley	Macadamia Trees
Cherries	Millet
Citrus I	Oats
Citrus IV	Onions
Citrus Trees I	Peaches
Citrus Trees IV	Peanuts
Citrus Trees V	Pears
Citrus V	Plums
Citrus VII	Popcorn
Corn	Potatoes
Cotton	Processing Apricots
Cranberries	Processing Cling Peaches
Cultivated Wild Rice	Prunes
Dry Beans	Raisins
Dry Peas	Rice
Figs	Rye
Flax	Safflower
Flue Cured Tobacco	Soybeans
Forage Production	Sunflowers
Forage Seeding	Sweet Corn
Fresh Apricots	Table Grapes
Fresh Freestone Peaches	Tomatoes
Fresh Nectarines	Walnuts
Grain Sorghum	Wheat

TABLE C5. 2004 Organic Crops Insured Under FCIC Plans of Insurance

2004 Organic Crops Insured Under FCIC Plans of Insurance	
Barley	Onions
Corn	Peanuts
Cotton	Popcorn
Dry Beans	Potatoes
Dry Peas	Processing Beans
Flax	Raisins
Flue Cured Tobacco	Rice
Forage Seeding	Safflower
Grain Sorghum	Soybeans
Green Peas	Sunflowers
Hybrid Corn Seed	Sweet Corn
Millet	Wheat
Oats	

Appendix D

Agricultural Resource Management Survey
2006 Soybean Production Costs

TABLE D1. Conventional Soybean Production Costs and Returns per Planted Acre, by Region, Excluding Government Payments, 2006 1/

Conventional soybean production costs and returns per planted acre, by region, excluding Government payments, 2006 1/

Item	Heartland	Northern Crescent	Northern Great Plains	Prairie Gateway	Eastern Uplands	Southern Seaboard	Mississippi Portal	All farms
	dollars per planted acre							
Gross value of production								
Primary product: Soybeans	276.00	255.68	179.86	227.22	208.80	194.48	213.84	254.38
Total, gross value of production	276.00	255.68	179.86	227.22	208.80	194.48	213.84	254.38
Operating costs:								
Seed	32.01	34.69	34.37	30.69	31.44	30.23	32.59	32.31
Fertilizer	12.73	19.69	6.13	7.61	21.11	34.76	13.01	13.05
Chemicals	14.40	14.01	12.50	12.95	11.49	15.76	18.57	14.49
Custom operations	5.27	8.15	5.06	7.66	7.24	5.32	9.15	6.01
Fuel, lube, and electricity	10.98	12.38	10.09	26.33	11.66	9.98	26.66	13.49
Repairs	10.59	10.50	12.25	16.85	10.50	9.62	17.89	11.79
Purchased irrigation water	0.00	0.00	0.00	1.54	0.00	0.00	0.00	0.11
Interest on operating capital	2.04	2.36	1.91	2.46	2.22	2.51	2.80	2.17
Total, operating costs	88.02	101.78	82.31	106.09	95.66	108.18	120.67	93.42
Allocated overhead:								
Hired labor	1.14	1.15	1.46	1.89	2.70	2.65	6.68	1.77
Opportunity cost of unpaid labor	14.29	16.60	13.17	19.01	16.63	17.43	18.13	15.16
Capital recovery of machinery and equipment	58.47	52.86	65.79	72.61	54.77	51.27	68.95	60.36
Opportunity cost of land (rental rate)	101.33	71.02	46.65	60.61	56.61	39.18	64.34	86.18
Taxes and insurance	7.93	9.99	6.88	8.00	6.16	6.83	7.50	7.92
General farm overhead	13.49	17.34	10.73	14.71	13.14	10.04	9.71	13.21
Total, allocated overhead	196.65	168.96	144.68	176.83	150.01	127.40	175.31	184.60
Total costs listed	284.67	270.74	226.99	282.92	245.67	235.58	295.98	278.02
Value of production less total costs listed	-8.67	-15.06	-47.13	-55.70	-36.87	-41.10	-82.14	-23.64
Value of production less operating costs	187.98	153.90	97.55	121.13	113.14	86.30	93.17	160.96
Supporting information:								
Yield (bushels per planted acre)	50	47	34	42	36	34	36	46
Price (dollars per bushel at harvest)	5.52	5.44	5.29	5.41	5.80	5.72	5.94	5.53
Enterprise size (planted acres) 1/	300	165	571	255	321	241	676	304
Production practices: 1/								
Irrigated (percent)	4	2	2	32	6	0	38	9
Dryland (percent)	96	98	98	68	94	100	62	91

1/ Developed from the 2006 Agricultural Resource Management Survey of Soybean Producers

TABLE D2 Conventional Soybean Production Costs and Returns per Planted Acre, by Size Group, Excluding Government Payments, 2006 1/

Conventional soybean production costs and returns per planted acre, by size group, excluding Government payments, 2006 1/

Item	Fewer than 50 acres	50-99 acres	100-499 acres	500-999 acres	1,000 acres or more	All farms
	dollars per planted acre					
Gross value of production						
Primary product: Soybeans	225.50	253.00	258.50	254.38	251.10	254.38
Total, gross value of production	225.50	253.00	258.50	254.38	251.10	254.38
Operating costs:						
Seed	36.36	33.13	32.46	32.41	31.53	32.31
Fertilizer	17.80	18.32	13.27	12.20	12.41	13.05
Chemicals	15.05	15.02	14.09	14.79	14.71	14.49
Custom operations	18.86	13.09	6.30	5.31	4.20	6.01
Fuel, lube, and electricity	10.59	11.55	12.91	14.55	13.88	13.49
Repairs	7.09	8.69	10.97	12.49	13.29	11.79
Purchased irrigation water	0.00	0.00	0.16	0.15	0.00	0.11
Interest on operating capital	2.51	2.37	2.14	2.18	2.14	2.17
Total, operating costs	108.26	102.17	92.30	94.08	92.16	93.42
Allocated overhead:						
Hired labor	0.21	0.43	0.86	2.03	3.38	1.77
Opportunity cost of unpaid labor	21.95	20.68	17.47	13.95	11.13	15.16
Capital recovery of machinery and equipment	39.89	49.01	59.14	63.08	62.84	60.36
Opportunity cost of land (rental rate)	75.15	85.18	89.67	86.22	81.11	86.18
Taxes and insurance	14.90	12.05	8.25	7.34	6.79	7.92
General farm overhead	20.89	22.36	14.48	12.02	10.25	13.21
Total, allocated overhead	172.99	189.71	189.87	184.64	175.50	184.60
Total costs listed	281.25	291.88	282.17	278.72	267.66	278.02
Value of production less total costs listed	-55.75	-38.88	-23.67	-24.34	-16.56	-23.64
Value of production less operating costs	117.24	150.83	166.20	160.30	158.94	160.96
Supporting information:						
Yield (bushels per planted acre)	41	46	47	46	45	46
Price (dollars per bushel at harvest)	5.50	5.50	5.50	5.53	5.58	5.53
Enterprise size (planted acres) 1/	29	72	248	699	1,687	304
Production practices: 1/						
Irrigated (percent)	1	2	6	11	13	9
Dryland (percent)	99	98	94	89	87	91

1/ Developed from the 2006 Agricultural Resource Management Survey of Soybean Producers

TABLE D3 Organic Soybean Production Costs and Returns per Planted Acre, by Region, Excluding Government Payments, 2006 1/

Organic soybean production costs and returns per planted acre, by region, excluding Government payments, 2006 1/

Item	Heartland	Northern Crescent	Northern Great Plains	All farms
	dollars per planted acre			
Gross value of production				
Primary product: Soybeans	454.40	485.44	272.84	434.10
Total, gross value of production	454.40	485.44	272.84	434.10
Operating costs:				
Seed	28.18	31.09	31.16	29.42
Fertilizer	10.91	7.36	12.11	10.63
Chemicals	0.00	0.06	0.47	0.10
Custom operations	5.98	5.21	2.23	6.53
Fuel, lube, and electricity	20.18	25.48	21.78	22.45
Repairs	13.31	17.01	18.58	15.68
Purchased irrigation water	0.00	0.00	0.00	0.05
Interest on operating capital	1.87	2.05	2.05	2.02
Total, operating costs	80.43	88.26	88.38	86.88
Allocated overhead:				
Hired labor	6.49	3.53	14.84	7.01
Opportunity cost of unpaid labor	48.18	35.67	27.67	41.66
Capital recovery of machinery and equipment	66.58	75.89	78.82	72.10
Opportunity cost of land (rental rate)	100.11	68.02	48.42	84.07
Taxes and insurance	12.30	10.36	11.10	11.99
General farm overhead	24.91	19.97	16.09	22.46
Total, allocated overhead	258.57	213.44	196.94	239.29
Total costs listed	339.00	301.70	285.32	326.17
Value of production less total costs listed	115.40	183.74	-12.48	107.93
Value of production less operating costs	373.97	397.18	184.46	347.22
Supporting information:				
Yield (bushels per planted acre)	32	32	19	30
Price (dollars per bushel at harvest)	14.20	15.17	14.36	14.47
Enterprise size (planted acres) 1/	66	99	191	84
Production practices: 1/				
Irrigated (percent)	2	2	18	5
Dryland (percent)	98	98	82	95

1/ Developed from the 2006 Agricultural Resource Management Survey of Soybean Producers

TABLE D4 Organic Soybean Production Costs and Returns per Planted Acre, by Region, Excluding Government Payments, 2006 1/

Organic soybean production costs and returns per planted acre, by size group, excluding Government payments, 2006 1/

Item	Fewer than 50 acres	50-99 acres	100 acres or more	All farms
	dollars per planted acre			
Gross value of production				
Primary product: Soybeans	312.84	488.25	460.35	434.10
Total, gross value of production	312.84	488.25	460.35	434.10
Operating costs:				
Seed	29.50	29.27	29.47	29.42
Fertilizer	11.74	10.79	10.18	10.63
Chemicals	0.01	0.06	0.15	0.10
Custom operations	9.10	4.59	6.78	6.53
Fuel, lube, and electricity	18.86	22.65	23.49	22.45
Repairs	10.96	14.52	17.84	15.68
Purchased irrigation water	0.00	0.17	0.00	0.05
Interest on operating capital	1.91	1.95	2.09	2.02
Total, operating costs	82.08	84.00	90.00	86.88
Allocated overhead:				
Hired labor	1.36	5.15	9.86	7.01
Opportunity cost of unpaid labor	70.65	42.56	31.87	41.66
Capital recovery of machinery and equipment	54.95	70.40	78.55	72.10
Opportunity cost of land (rental rate)	72.88	103.95	76.57	84.07
Taxes and insurance	12.95	13.31	10.95	11.99
General farm overhead	30.39	26.15	17.85	22.46
Total, allocated overhead	243.18	261.52	225.65	239.29
Total costs listed	325.26	345.52	315.65	326.17
Value of production less total costs listed	-12.42	142.73	144.70	107.93
Value of production less operating costs	230.76	404.25	370.35	347.22
Supporting information:				
Yield (bushels per planted acre)	22	35	31	30
Price (dollars per bushel at harvest)	14.22	13.95	14.85	14.47
Enterprise size (planted acres) 1/	26	71	250	84
Production practices: 1/				
Irrigated (percent)	1	4	8	5
Dryland (percent)	99	96	92	95

1/ Developed from the 2006 Agricultural Resource Management Survey of Soybean Producers

Appendix E

Agricultural Marketing Service Organic Pricing Data

TABLE E1. Feed Grade Corn Organic Pricing Data

Reporting Week	2007	2008	2009
	Weighted Average Price (dollars)		
2		9.51	8.57
4		9.74	8.42
6	6.16	10.24	8.25
8	6.42	9.91	8.13
10	6.35	9.82	7.50
12	6.49	10.27	7.78
14	6.92	10.18	7.48
16	7.02	10.19	7.02
18	7.64	10.40	
20	7.06	10.51	
22	8.30	10.48	
24	10.39	10.73	
26	10.93	10.82	
28	11.43	11.06	
30	10.88	10.87	
32	10.35	11.48	
34	10.64	10.86	
36	11.13	10.66	
38	9.18	10.63	
40	9.43	10.54	
42	9.17	10.09	
44	9.32	9.51	
46	9.03	9.38	
48	8.95	9.17	
50	9.22	9.14	
52	9.25	8.32	

Source: Agricultural Marketing Service

TABLE E2. Feed Grade Soybeans Organic Pricing Data

Reporting Week	2007	2008	2009
	Weighted Average Price (dollars)		
2		20.51	19.05
4		21.82	18.91
6		22.52	18.07
8		22.98	18.41
10	13.12	25.47	17.56
12	12.69	24.45	17.77
14	13.86		17.83
16	14.68		
18	14.41		
20		23.37	
22			
24	13.36		
26	13.83	28.15	
28	13.29	26.56	
30	15.68	26.36	
32	15.41	29.87	
34	14.41		
36		29.16	
38			
40	15.70	24.92	
42	16.34		
44	15.72	22.96	
46	15.92	21.99	
48	16.51		
50	18.10	19.09	
52	18.24		

Source: Agricultural Marketing Service

TABLE E3. Feed Grade Oats Organic Pricing Data

Reporting Week	2007	2008	2009
	Weighted Average Price (dollars)		
2		4.60	
4			
6		4.93	
8		5.20	4.67
10		5.51	
12	3.40		
14			4.26
16			
18	3.59		
20	3.50		
22	3.48		
24	3.50		
26	3.50		
28		6.00	
30	3.36		
32	3.61		
34	3.65	4.82	
36	3.41	4.89	
38	3.54	4.39	
40	3.55	4.61	
42	3.51	4.67	
44	3.82	4.75	
46	3.95		
48	3.73		
50	4.09		
52	4.15		

Source: Agricultural Marketing Service

TABLE E4. Feed Grade Barley Organic Pricing Data

Reporting Week	2007	2008	2009
	Weighted Average Price (dollars)		
2			7.97
4			
6			
8			7.86
10			7.45
12	4.31	8.05	
14	5.31		6.88
16			6.12
18	5.18		
20			
22			
24		8.43	
26	6.64		
28			
30	7.53		
32	5.90	8.40	
34	6.08	7.20	
36	6.51	8.21	
38	6.41		
40	6.11	7.54	
42			
44		7.14	
46			
48		7.49	
50	7.13		
52			

Source: Agricultural Marketing Service

TABLE E5. Feed Grade Wheat Organic Pricing Data

Reporting Week	2007	2008	2009
	Weighted Average Price (dollars)		
2		13.54	
4			
6			
8			
10			
12			
14	7.13		
16	6.48		
18	5.89		
20			
22			
24			
26	7.50		
28	7.30		
30	8.16		
32	8.45		
34			
36			
38	8.82		
40			
42	9.09		
44			
46			
48			
50			
52			

Source: Agricultural Marketing Service

TABLE E6. Feed Grade Hard Red Wheat Organic Pricing Data

Reporting Week	2007	2008	2009
	Weighted Average Price (dollars)		
2			
4			
6			
8			7.82
10			7.78
12			
14			7.38
16			6.48
18			
20			
22			
24			
26			
28			
30		15.86	
32			
34			
36			
38		9.48	
40		9.41	
42			
44		9.46	
46		9.17	
48		9.15	
50			
52			

Source: Agricultural Marketing Service

Appendix F

Retail Organic Crop Prices

Exhibit 1

Maine Retail Organic Prices 2008

This information is no longer available online.

Exhibit 2

Maine Retail Organic Prices 2007

This information is located at:
http://mofga.org/Portals/2/Reports/MOFGA%20Organic%20Price%20Report-%202007%20Wholesale%20Season%20Summary.pdf

Exhibit 3

Maine Retail Organic Prices 2006

This information is located at:
http://mofga.org/Portals/2/Reports/2006%20End%20Of%20Year%20WHOLESALE.pdf

Exhibit 4

Wisconsin Retail Organic Prices 2008

Wisconsin 2008 Retail Organic Pricing Data
Below is only a sample of the data; see link to full dataset (Exhibit 4 Data)

Wisconsin 2008 Retail Organic Pricing Data

NAP CROP NAME	Average direct to consumer price	Number of Responses	FSA Crop Table Prices
Averages	**$4.82**		**$0.89**
Apples	$2.66	1	
Artichokes	$2.75	1	$0.59
Asparagus	$3.48	7	$0.55
Beans, Black Turtle	$7.50	1	
Beans, Green	$2.22	6	$0.33
Beans, Green Baby French	$3.42	4	$0.33
Beans, Jacobs Cattle	$7.50	1	
Beans, Roma	$2.70	1	
Beans, Yellow Wax	$2.30	6	$0.33
Beets, bulk	$1.40	8	$0.29
Beets, green top	$1.69	2	$0.29
Blueberries		0	$1.37
Broccoflower	$3.00	1	$0.59
Broccoli	$2.21	8	$0.30
Brussel Sprouts	$3.50	2	$0.67
Cabbage, Hybrid (Green)	$0.69	6	$0.08
Cabbage, Napa	$1.86	2	$0.25
Cabbage, Red	$0.52	6	$0.08
Canary Melon	$1.60	1	
Cantaloupe	$1.02	6	$0.18
Carrots, bulk	$1.38	8	$0.13
Carrots, bunched	$1.72	2	$0.13
Casaba Melon		0	
Cauliflower	$1.52	6	$0.20
Celeriac	$1.42	4	$0.93
Celery	$1.63	1	
Cherries		0	
Chicory/Radicchio	$4.50	1	
Chinese Bitter Melon		0	
Corn, Popcorn	$4.50	1	$0.12
Corn, Sweet	$1.60	3	$0.23
Cranberries	$5.63	1	

Source: Laura Paine, Grazing and Organic Agriculture Specialist, Division of Agricultural Development, State of Wisconsin.

Appendix G

Relevant Rodale Institute – RMA Partnership Data

List of Tables

TABLE G1. Wholesale Pricing Data for Boston Apples: Gala, 88 Count
Below is only a sample of the data; see link to full dataset (Table G1 Data)

Wholesale Pricing for Boston Apples: Gala, 88 Count

Date	Quality	Organic Price	Conventional Price	Notes
2004-10-19	PQ	39.75	16.00	
2004-10-26	PQ	39.75	24.00	
2004-11-01	PQ	36.00	24.00	
2004-11-15	PQ	36.00	24.00	
2004-11-23	PQ	36.00	26.00	
2004-11-30	PQ	36.00	26.00	
2004-12-06	PQ	36.00	26.00	
2004-12-14	PQ	29.50	26.00	
2004-12-21	PQ	29.50		
2004-12-28	PQ	29.50		
2005-01-05	PQ	32.00	26.00	
2005-01-11	PQ	30.75	26.00	
2005-01-19	PQ	30.75	26.00	
2005-01-25	PQ	30.75	26.00	
2005-02-01	PQ	34.50	27.00	
2005-02-08	PQ	34.50	19.00	
2005-02-15	PQ	34.50	19.00	
2005-02-22	PQ	35.50	19.00	
2005-03-01	PQ		18.00	
2005-03-08	PQ	43.25	26.00	
2005-03-15	PQ	43.25	26.00	
2005-03-22	PQ	43.25	26.00	
2005-03-29	PQ	43.25	18.00	
2005-04-05	PQ	31.50	18.00	
2005-04-12	PQ	54.25	22.00	organic price for 90 Ct
2005-04-19	PQ	43.25	23.00	organic price for 90 Ct
2005-04-26	PQ	43.25	23.00	organic price for 90 Ct
2005-05-03	PQ	47.25	23.00	organic price for 90 Ct
2005-05-10	PQ		24.00	
2005-05-17	PQ	51.50	28.00	organic price for 80 Ct
2005-05-24	PQ	64.00	34.00	
2005-05-31	PQ		34.00	
2005-06-07	PQ	64.00	34.00	organic price for 80 Ct
2005-06-16	PQ	61.50	34.00	organic price for 90 Ct
2005-06-21	PQ	61.50	34.00	organic price for 90 Ct
2005-06-28	PQ	64.00	38.00	organic price for 80 Ct; conventional price for 90 Ct
2005-07-06	PQ	64.00	38.00	organic price for 80 Ct; conventional price for 90 Ct
2005-07-12	PQ	62.25	38.00	organic and conventional price for 90 Ct
2005-07-19	PQ		38.00	conventional price for 90 Ct
2005-07-26	PQ		36.00	conventional price for 90 Ct
2005-08-03	PQ		32.00	conventional price for 90 Ct
2005-08-09	PQ		33.00	conventional price for 90 Ct
2005-08-16	PQ		33.00	conventional price for 90 Ct

TABLE G2. Additional Available Apple Data

Crop	Market	First Report	Last Report	Number of Observations
Apples: Ambrosia	Boston	10/19/2004	10/26/2004	2
Apples: Ambrosia	Chicago	12/6/2004	3/19/2007	39
Apples: Ambrosia	Philadelphia	10/14/2004	10/25/2004	2
Apples: Ambrosia	San Francisco	10/25/2004	11/23/2004	5
Apples: Ambrosia	Seattle	10/20/2004	3/21/2006	31
Apples: Fuji	Boston	10/19/2004	2/5/2009	138
Apples: Fuji	Chicago	2/6/2007	2/12/2008	225
Apples: Fuji	Los Angeles	2/5/2008	3/24/2009	58
Apples: Fuji	Philadelphia	10/14/2004	3/5/2009	184
Apples: Fuji	San Francisco	10/21/2004	3/24/2009	292
Apples: Fuji	Seattle	10/20/2004	3/24/2009	425
Apples: Gala	Boston	10/19/2004	3/24/2009	384
Apples: Gala	Chicago	12/6/2004	9/18/2007	110
Apples: Gala	Los Angeles	2/5/2008	3/24/2009	83
Apples: Gala	Philadelphia	10/14/2004	3/24/2009	345
Apples: Gala	San Francisco	10/21/2004	3/24/2009	301
Apples: Gala	Seattle	10/20/2004	3/24/2009	358
Apples: Golden Delicious	Boston	2/20/2003	3/24/2009	468
Apples: Golden Delicious	Chicago	12/6/2004	2/12/2008	168
Apples: Golden Delicious	Los Angeles	2/5/2008	3/24/2009	70
Apples: Golden Delicious	Philadelphia	10/14/2004	3/24/2009	289
Apples: Golden Delicious	San Francisco	10/21/2004	3/24/2009	247
Apples: Golden Delicious	Seattle	2/20/2003	1/6/2009	351
Apples: Granny Smith	Boston	10/19/2004	3/24/2009	342
Apples: Granny Smith	Chicago	12/6/2004	2/12/2008	138
Apples: Granny Smith	Los Angeles	2/5/2008	3/24/2009	87
Apples: Granny Smith	Philadelphia	10/14/2004	3/24/2009	335
Apples: Granny Smith	San Francisco	10/21/2004	3/24/2009	314
Apples: Granny Smith	Seattle	10/20/2004	3/24/2009	157
Apples: Red Delicious	Boston	10/19/2004	3/24/2009	369
Apples: Red Delicious	Chicago	12/6/2004	2/12/2008	155
Apples: Red Delicious	Los Angeles	2/5/2008	3/24/2009	89
Apples: Red Delicious	Philadelphia	10/14/2004	3/24/2009	369
Apples: Red Delicious	San Francisco	10/21/2004	3/24/2009	286
Apples: Red Delicious	Seattle	10/20/2004	3/24/2009	301

TABLE G3. Wholesale Pricing Data for San Francisco Avocado: Hass
Below is only a sample of the data; see link to full dataset (Table G3 Data)

Wholesale Pricing for San Francisco Avocado: Hass

Date	Unit	Quality	Organic Price	Conventional Price	Notes
2004-10-25	36 Ct	PQ	36.00		
2004-11-02	48 Ct	PQ	39.95	39.00	
2004-11-16	48 Ct	PQ	61.00	39.00	
2004-11-23	48 Ct	PQ	36.00	22.00	
2004-12-07	50 Ct	PQ	40.00		
2004-12-14	48 Ct	PQ	37.00	23.50	
2004-12-21	48 Ct	PQ	50.00	40.00	
2004-12-28	48 Ct	PQ	50.00	40.00	
2005-01-05	48 Ct	PQ	46.00	36.50	
2005-01-11	48 Ct	PQ	64.00	36.50	
2005-01-19	48 Ct	PQ	63.00	35.00	
2005-01-25	48 Ct	PQ	63.00	34.00	
2005-02-01	48 Ct	PQ	61.00	34.00	
2005-02-08	48 Ct	PQ	56.00	28.00	
2005-02-15	48 Ct	PQ	55.00	28.50	
2005-02-22	48 Ct	PQ	58.00	28.50	
2005-03-01	48 Ct	PQ	56.00	32.00	
2005-03-08	48 Ct	PQ	58.00	31.50	
2005-03-15	48 Ct	PQ	58.00	30.00	
2005-03-22	48 Ct	PQ	58.00	31.00	
2005-03-29	48 Ct	PQ	56.00	31.00	
2005-04-05	48 Ct	PQ	57.00	33.00	
2005-04-12	48 Ct	PQ	57.00	27.00	
2005-04-19	48 Ct	PQ	57.00	30.00	
2005-04-26	48 Ct	PQ	35.00	33.00	
2005-05-03	48 Ct	PQ	58.00	32.00	
2005-05-10	48 Ct	PQ	58.00	32.00	
2005-05-17	48 Ct	PQ		32.50	
2005-05-24	48 Ct	PQ	61.00	36.00	
2005-05-31	48 Ct	PQ	67.00	36.00	
2005-06-07	48 Ct	PQ	60.00	36.00	
2005-06-16	48 Ct	PQ	65.00	36.00	
2005-06-21	48 Ct	PQ	65.00	38.50	
2005-06-28	48 Ct	PQ	55.00	38.50	
2005-07-06	48 Ct	PQ	45.00	41.00	
2005-07-12	48 Ct	PQ	67.00	49.00	
2005-07-19	48 Ct	PQ	74.00	42.50	
2005-07-26	48 Ct	PQ	75.00	49.50	

TABLE G4. Additional Available Avocado Data

Crop	Market	First Report	Last Report	Number of Observations
Avocado: Hass	Boston	10/26/2004	3/24/2009	422
Avocado: Hass	Chicago	2/6/2007	2/12/2008	195
Avocado: Hass	Los Angeles	2/5/2008	3/24/2009	101
Avocado: Hass	Philadelphia	10/25/2004	3/24/2009	414
Avocado: Hass	San Francisco	10/25/2004	3/24/2009	411
Avocado: Hass	Seattle	10/25/2004	3/24/2009	231

TABLE G5. Commodity Pricing Data for Minneapolis Barley: Feed, Bushel – Continued
Below is only a sample of the data; see link to full dataset (Table G5 Data)

Wholesale Pricing for Minneapolis Barley: Feed, Bushel

Date	Quality	Organic Price	Conventional Price
2004-10-19	PQ	2.75	
2004-10-26	PQ	2.75	
2004-11-02	PQ	2.75	
2004-11-15	PQ	2.75	
2004-11-22	PQ	2.75	
2004-11-30	PQ	2.75	
2004-12-07	PQ	2.75	1.70
2004-12-14	PQ	2.75	1.70
2004-12-21	PQ	2.75	1.70
2004-12-28	PQ	2.75	1.70
2005-01-05	PQ	2.75	1.70
2005-01-11	PQ	2.75	1.70
2005-01-19	PQ	2.75	1.70
2005-01-25	PQ	2.75	1.70
2005-02-01	PQ	2.75	1.70
2005-02-08	PQ	2.75	1.70
2005-02-15	PQ	2.75	1.70
2005-02-22	PQ	2.75	1.70
2005-03-01	PQ	2.75	1.70
2005-03-08	PQ	2.75	1.70
2005-03-15	PQ	2.75	1.70
2005-03-22	PQ	2.75	1.70
2005-03-29	PQ	2.75	1.70
2005-04-05	PQ	2.75	1.70
2005-04-12	PQ	2.75	1.70
2005-04-19	PQ	2.75	1.70
2005-04-26	PQ	2.75	1.70
2005-05-03	PQ	2.75	1.70
2005-05-10	PQ	2.75	1.70
2005-05-17	PQ	2.75	1.70
2005-05-24	PQ	2.75	1.70
2005-05-31	PQ	2.75	1.70
2005-06-07	PQ	2.75	1.70
2005-06-16	PQ	2.75	1.70
2005-06-21	PQ	2.75	1.70
2005-06-28	PQ	2.75	1.60
2005-07-06	PQ	2.75	1.60
2005-07-12	PQ	2.75	1.60
2005-07-19	PQ	2.75	1.70
2005-07-26	PQ	2.75	1.70

TABLE G6. Additional Available Barley Data

Crop	Market	First Report	Last Report	Number of Observations
Barley: Feed	Chicago	10/19/2004	11/30/2004	6
Barley: Feed	Dallas	10/26/2004	12/28/2004	9
Barley: Feed	Fargo	10/19/2004	12/9/2008	138
Barley: Feed	Minneapolis	10/19/2004	3/26/2009	383
Barley: Feed	Omaha	10/20/2004	1/23/2007	117
Barley: Feed	San Francisco	10/26/2004	3/26/2009	120
Barley: Feed	Seattle	11/30/2004	8/5/2008	78
Barley: Malting	Chicago	10/19/2004	11/30/2004	6
Barley: Malting	Dallas	10/26/2004	12/28/2004	9
Barley: Malting	Fargo	11/2/2004	8/21/2007	58
Barley: Malting	Minneapolis	12/14/2004	1/15/2009	310
Barley: Malting	San Francisco	10/26/2004	2/27/2009	23
Barley: Malting	Seattle	12/14/2004	5/8/2007	5

TABLE G7. Wholesale Pricing Data for Boston Blueberries
Below is only a sample of the data; see link to full dataset (Table G7 Data)

Wholesale Pricing for Boston Blueberries

Date	Unit	Quality	Organic Price	Conventional Price	Notes
2003-02-20	Flat 12 6-oz Cups w/lids	PQ		32.00	
2003-02-20	Flat 12 6-oz Cups w/lids	RQ		30.00	
2003-02-25	Flat 12 6-oz Cups w/lids	PQ		28.00	
2003-03-03	Flat 12 6-oz Cups w/lids	PQ		21.00	
2003-03-03	Flat 12 6-oz Cups w/lids	RQ		18.00	
2003-03-10	Flat 12 6-oz Cups w/lids	PQ		24.00	
2003-03-10	Flat 12 6-oz Cups w/lids	RQ		18.00	
2003-03-17	Flat 12 6-oz Cups w/lids	PQ		21.00	
2003-03-17	Flat 12 6-oz Cups w/lids	RQ		18.00	
2003-03-24	Flat 12 6-oz Cups w/lids	PQ		20.00	
2003-03-24	Flat 12 6-oz Cups w/lids	RQ		18.00	
2003-03-31	Flat 12 6-oz Cups w/lids	PQ		21.00	
2003-03-31	Flat 12 6-oz Cups w/lids	RQ		20.00	
2003-04-22	Flat 12 6-oz Cups w/lids	PQ		33.00	western conventional too light to quote
2003-04-22	Flat 12 6-oz Cups w/lids	RQ		32.00	
2003-04-29	Flat 12 6-oz Cups w/lids	PQ		25.00	western conventional too light to quote
2003-04-29	Flat 12 6-oz Cups w/lids	RQ		22.50	
2003-05-07	Flat 12 6-oz Cups w/lids	PQ		20.00	western conventional too light to quote
2003-05-07	Flat 12 6-oz Cups w/lids	RQ		19.00	
2003-05-13	Flat 12 6-oz Cups w/lids	PQ		18.00	western conventional too light to quote
2003-05-13	Flat 12 6-oz Cups w/lids	RQ		16.00	
2003-05-20	Flat 12 6-oz Cups w/lids	PQ		18.00	western conventional too light to quote
2003-05-20	Flat 12 6-oz Cups w/lids	RQ		16.00	
2003-05-27	Flat 12 6-oz Cups w/lids	PQ		21.00	
2003-05-27	Flat 12 6-oz Cups w/lids	RQ		18.00	
2003-06-10	Flat 12 6-oz Cups w/lids	PQ		24.00	
2003-06-10	Flat 12 6-oz Cups w/lids	RQ		22.00	
2003-06-16	Flat 12 6-oz Cups w/lids	PQ		29.00	
2003-06-16	Flat 12 6-oz Cups w/lids	RQ		27.00	
2003-06-24	Flat 12 6-oz Cups w/lids	PQ	36.00	12.00	
2003-06-24	Flat 12 6-oz Cups w/lids	RQ		11.00	
2003-07-01	Flat 12 6-oz Cups w/lids	PQ	36.00	21.00	
2003-07-01	Flat 12 6-oz Cups w/lids	RQ		20.00	

TABLE G8. Additional Available Blueberry Data

Crop	Market	First Report	Last Report	Number of Observations
Blueberries	Boston	2/20/2003	3/24/2009	446
Blueberries	Chicago	2/6/2007	2/12/2008	158
Blueberries	Los Angeles	2/5/2008	3/24/2009	77
Blueberries	Philadelphia	12/21/2004	3/24/2009	248
Blueberries	San Francisco	12/7/2004	3/24/2009	239
Blueberries	Seattle	2/20/2003	3/24/2009	481

TABLE G9. Wholesale Pricing Data for San Francisco Cabbage: Green
Below is only a sample of the data; see link to full dataset (Table G9 Data)

Wholesale Pricing for San Francisco Cabbage: Green

Date	Unit	Quality	Organic Price	Conventional Price	Notes
2004-10-21	45#	PQ	24.00	20.00	
2004-10-25	45#	PQ	29.50	13.00	
2004-11-02	40#	PQ	29.95	12.00	
2004-11-16	40#	PQ	35.00	10.00	
2004-11-23	40#	PQ	36.00	14.00	
2004-11-30	40#	PQ	36.00	14.00	
2004-12-07	40#	PQ	33.00	14.00	
2004-12-14	40#	PQ	33.00	14.00	conv price for 45#
2004-12-21	40#	PQ	33.00	14.00	
2004-12-28	40#	PQ	33.00	14.00	
2005-01-05	40#	PQ	33.00	14.00	conv price for 45#
2005-01-11	40#	PQ	33.00	17.00	conventional price for 45#
2005-01-19	40#	PQ	25.00	12.00	
2005-01-25	40#	PQ	25.00	10.00	
2005-02-01	40#	PQ	20.00	10.00	organic and conventional price for 45#
2005-02-08	40#	PQ	21.00	10.00	conventional price for 45#
2005-02-15	40#	PQ	21.00	10.00	
2005-02-22	40#	PQ	22.00	14.00	
2005-03-01	40#	PQ	24.00	10.00	
2005-03-08	40#	PQ	21.50	12.00	conventional price for 45#
2005-03-15	40#	PQ	22.00	12.50	conventional price for 45#
2005-03-22	40#	PQ	24.00	10.50	conventional price for 45#
2005-03-29	40#	PQ	26.00	10.50	conventional price for 45#
2005-04-05	40#	PQ	36.00	11.00	organic and conventional price for 45#
2005-04-12	40#	PQ	36.50	10.00	conventional price for 45#
2005-04-19	40#	PQ	42.00	16.50	organic and conventional price for 45#
2005-04-26	40#	PQ	42.00	13.50	organic and conventional price for 45#
2005-05-03	40#	PQ	49.50	15.00	conventional price for 45#
2005-05-10	40#	PQ	42.00	14.00	conventional price for 45#
2005-05-17	40#	PQ	31.00	14.00	conventional price for 45#
2005-05-24	40#	PQ	29.50	15.50	
2005-05-31	40#	PQ	26.00	14.50	conventional price for 45#
2005-06-07	40#	PQ	24.00	14.50	conventional price for 45#
2005-06-16	40#	PQ	23.00	12.00	conventional price for 45#
2005-06-21	40#	PQ	17.50	13.00	conventional price for 45#
2005-06-28	40#	PQ	18.50	9.50	conventional price for 45#
2005-07-06	40#	PQ	18.50	9.50	conventional price for 45#
2005-07-12	40#	PQ	18.50	9.50	conventional price for 45#

TABLE G10. Additional Available Cabbage Data

Crop	Market	First Report	Last Report	Number of Observations
Cabbage, Green	Boston	10/20/2004	3/24/2009	196
Cabbage, Green	Chicago	12/6/2004	2/12/2008	178
Cabbage, Green	Los Angeles	2/5/2008	3/24/2009	98
Cabbage, Green	Philadelphia	10/20/2004	3/24/2009	195
Cabbage, Green	San Francisco	10/21/2004	3/24/2009	365
Cabbage, Green	Seattle	10/19/2004	3/24/2009	336

TABLE G11. Commodity Pricing Data for Fargo Corn, #2 Yellow, Bushel
Below is only a sample of the data; see link to full dataset (Table G11 Data)

Wholesale Pricing for Fargo Corn, #2 Yellow, Bushel

Date	Quality	Organic Price	Conventional Price
2004-10-19	PQ	4.50	
2004-10-19	RQ	4.00	
2004-10-26	PQ	4.50	1.53
2004-10-26	RQ	4.00	
2004-11-02	PQ	4.75	1.55
2004-11-02	RQ	4.25	
2004-11-15	PQ	4.75	1.57
2004-11-15	RQ	4.25	
2004-11-22	PQ	4.75	1.87
2004-11-22	RQ	4.25	
2004-11-30	PQ	4.75	1.87
2004-11-30	RQ	4.25	
2004-12-07	PQ	4.75	1.55
2004-12-14	PQ	4.75	1.53
2004-12-21	PQ	4.75	1.67
2004-12-28	PQ	4.75	1.67
2005-01-05	PQ	4.75	1.69
2005-01-11	PQ	4.75	1.75
2005-01-19	PQ	4.75	1.67
2005-01-25	PQ	4.75	1.70
2005-02-01	PQ		1.74
2005-02-08	PQ		1.73
2005-02-15	PQ	5.50	1.78
2005-02-22	PQ	5.50	1.84
2005-03-01	PQ	5.50	1.90
2005-03-08	PQ	5.50	1.81
2005-03-15	PQ	5.50	1.89
2005-03-22	PQ	5.50	1.82
2005-03-29	PQ	5.50	1.82
2005-04-05	PQ	5.50	1.82
2005-04-12	PQ	5.50	1.80
2005-04-19	PQ	5.50	1.81
2005-04-26	PQ	5.50	1.93
2005-05-03	PQ	5.50	1.77
2005-05-10	PQ	5.50	1.82
2005-05-17	PQ	5.50	1.82
2005-05-24	PQ	5.50	1.91
2005-05-31	PQ	5.50	1.90
2005-06-07	PQ	5.50	1.89
2005-06-16	PQ	5.50	1.83
2005-06-21	PQ	5.50	2.02
2005-06-28	PQ	5.50	1.88

TABLE G12. Additional Available Corn Data

Crop	Market	First Report	Last Report	Number of Observations
Corn, #2 Yellow	Chicago	10/19/2004	3/26/2009	218
Corn, #2 Yellow	Dallas	10/20/2004	3/26/2009	439
Corn, #2 Yellow	Detroit	10/20/2004	3/26/2009	439
Corn, #2 Yellow	Fargo	10/19/2004	3/26/2009	442
Corn, #2 Yellow	Minneapolis	10/19/2004	3/26/2009	437
Corn, #2 Yellow	Omaha	10/20/2004	3/26/2009	438
Corn, #2 Yellow	San Francisco	10/26/2004	3/26/2009	430
Corn, #2 Yellow	Seattle	2/21/2003	3/26/2009	627
Corn, White	Seattle	8/10/2004	10/18/2004	10

TABLE G13. Wholesale Pricing Data for San Francisco Grapefruit: Ruby, 48 Count
Below is only a sample of the data; see link to full dataset (Table G13 Data)

Wholesale Pricing for San Francisco Grapefruit: Ruby, 48 Count

Date	Quality	Organic Price	Conventional Price	Notes
2004-10-21	PQ	16.96	19.00	
2004-11-02	PQ		21.00	
2004-11-16	PQ		20.00	
2004-11-23	PQ	39.00	16.00	
2004-11-30	PQ		14.00	
2004-12-07	PQ	39.00	15.50	
2004-12-14	PQ	38.00	15.00	
2004-12-21	PQ	38.00	15.00	
2004-12-28	PQ		14.50	
2005-01-05	PQ	30.00	14.50	
2005-01-11	PQ	30.00	14.50	
2005-01-19	PQ	26.00	16.00	
2005-01-25	PQ	26.00	15.00	
2005-02-01	PQ	26.00	15.00	
2005-02-08	PQ	27.00	16.00	
2005-02-15	PQ	26.00	16.00	
2005-02-22	PQ	25.00	14.50	
2005-03-01	PQ	23.00	14.00	
2005-03-08	PQ	23.00	17.00	
2005-03-15	PQ	23.00	18.00	conventional offerings light
2005-03-22	PQ	23.00	16.00	
2005-03-29	PQ	22.00	16.00	
2005-04-05	PQ	22.00	16.00	
2005-04-12	PQ	22.00	16.00	
2005-04-19	PQ	21.50	18.50	
2005-04-26	PQ	21.50	18.00	
2005-05-03	PQ	22.50	18.00	
2005-05-10	PQ	21.00	18.00	
2005-05-17	PQ	25.00	18.00	
2005-05-24	PQ	25.00	18.00	
2005-05-31	PQ		18.00	
2005-06-07	PQ	25.00	21.00	
2005-06-16	PQ	23.00	18.00	
2005-06-21	PQ	23.00	18.00	
2005-06-28	PQ	23.00	21.00	
2005-07-06	PQ	19.50	21.00	
2005-07-12	PQ	19.50	21.00	
2005-07-19	PQ	27.00	21.00	
2005-07-26	PQ	24.00	22.00	
2005-08-03	PQ	24.50	22.00	
2005-08-09	PQ	22.50	22.00	
2005-08-16	PQ	25.00	22.00	organic price for 40 Ct
2005-08-19	PQ	25.00	22.00	

TABLE G14. Additional Available Grapefruit Data

Crop	Market	First Report	Last Report	Number of Observations
Grapefruit: Ruby	Boston	2/20/2003	3/24/2009	488
Grapefruit: Ruby	Chicago	12/6/2004	2/12/2008	135
Grapefruit: Ruby	Los Angeles	2/5/2008	3/5/2009	73
Grapefruit: Ruby	Philadelphia	10/14/2004	3/5/2009	237
Grapefruit: Ruby	San Francisco	10/21/2004	3/24/2009	370
Grapefruit: Ruby	Seattle	2/20/2003	3/24/2009	622

TABLE G15. Wholesale Pricing Data for Boston Grapes: Thompson
Below is only a sample of the data; see link to full dataset (Table G15 Data)

Wholesale Pricing for Boston Grapes: Thompson

Date	Unit	Quality	Organic Price	Conventional Price	Notes
2003-02-20	19#	PQ		16.00	
2003-02-20	19#	RQ		10.00	
2003-02-25	19#	PQ		17.50	
2003-02-25	19#	RQ		15.00	
2003-03-03	19#	PQ		18.00	
2003-03-03	19#	RQ		16.00	
2003-03-10	19#	PQ	13.00		
2003-03-10	19#	RQ	11.00		
2003-03-17	19#	PQ		20.00	
2003-03-17	19#	RQ		19.00	
2003-03-24	19#	PQ		17.00	poor condition in East
2003-03-24	19#	RQ		16.00	
2003-03-31	19#	PQ		9.50	poor condition in East
2003-03-31	19#	RQ		9.00	
2003-04-08	19#	PQ		20.00	poor condition in East
2003-04-08	19#	RQ		18.00	
2003-04-22	19#	PQ		23.00	quote for 18# lugs
2003-04-22	19#	RQ		22.00	
2003-04-29	19#	PQ		16.00	
2003-05-07	19#	PQ		28.00	
2003-05-07	19#	RQ		27.00	
2003-05-13	19#	PQ		14.00	
2003-05-13	19#	RQ		12.00	
2003-05-20	19#	PQ		12.00	
2003-05-20	19#	RQ		10.00	
2003-05-27	19#	PQ		13.00	
2003-05-27	19#	RQ		12.00	
2003-07-01	19#	PQ	27.50	24.00	
2003-07-01	19#	RQ	22.00	23.00	
2003-07-08	19#	PQ	27.50	20.00	
2003-07-08	19#	RQ	22.00		
2003-07-14	19#	PQ		20.00	
2003-07-14	19#	RQ		20.00	
2003-07-25	19#	PQ		20.00	
2003-07-25	19#	RQ		19.00	
2003-07-29	19#	PQ	30.00	20.00	
2003-07-29	19#	RQ	27.00	19.00	
2003-08-04	19#	PQ	30.00	18.50	
2003-08-04	19#	RQ		15.00	
2003-08-12	19#	PQ	26.00	19.00	
2003-08-12	19#	RQ	25.00	17.00	
2003-08-19	19#	PQ	26.00	18.00	

TABLE G16. Additional Available Grape Data

Crop	Market	First Report	Last Report	Number of Observations
Grapes: Thompson	Boston	2/20/2003	3/24/2009	361
Grapes: Thompson	Chicago	12/6/2004	2/12/2008	179
Grapes: Thompson	Los Angeles	2/5/2008	3/24/2009	44
Grapes: Thompson	Philadelphia	10/14/2004	3/24/2009	196
Grapes: Thompson	San Francisco	10/21/2004	3/24/2009	219
Grapes: Thompson	Seattle	2/20/2003	3/24/2009	322

TABLE G17. Wholesale Pricing Data for Boston Lemon, 140 Count
Below is only a sample of the data; see link to full dataset (Table G17 Data)

Wholesale Pricing for Boston Lemon, 140 Count

Date	Quality	Organic Price	Conventional Price	Notes
2004-10-19	PQ	59.00	33.00	
2004-11-01	PQ	55.00	22.00	
2004-11-15	PQ	48.00	29.00	
2004-11-23	PQ	48.00	28.00	
2004-11-30	PQ	39.75	28.00	
2004-12-06	PQ	36.00	21.00	
2004-12-14	PQ	36.00	28.00	
2004-12-21	PQ	36.00	27.00	
2004-12-28	PQ	32.00	22.00	
2005-01-05	PQ	32.00	27.00	
2005-01-11	PQ	46.00	27.00	
2005-01-19	PQ		27.00	
2005-01-25	PQ		27.00	
2005-02-01	PQ		23.00	
2005-02-08	PQ	34.50	21.00	
2005-02-15	PQ	34.50	28.00	
2005-02-22	PQ	35.50	20.00	
2005-03-01	PQ	36.00	20.00	
2005-03-08	PQ	31.50	28.00	
2005-03-15	PQ	31.50	28.00	
2005-03-22	PQ	31.50	22.00	
2005-03-29	PQ	31.50	20.00	
2005-04-05	PQ		32.00	
2005-04-12	PQ	31.50	33.00	
2005-04-19	PQ	31.50	33.00	
2005-04-26	PQ	31.50	33.00	
2005-05-03	PQ	31.50	23.00	
2005-05-10	PQ	39.25	33.00	
2005-05-17	PQ	39.25	33.00	
2005-05-24	PQ	43.25	36.00	
2005-05-31	PQ	43.25	36.00	
2005-06-07	PQ	56.75	24.00	
2005-06-16	PQ		38.00	
2005-06-21	PQ	63.75	26.00	
2005-06-28	PQ	63.75	26.00	
2005-07-06	PQ	29.00	40.00	
2005-07-12	PQ		27.00	
2005-07-19	PQ	63.75	41.00	
2005-07-26	PQ	63.75	41.00	
2005-08-03	PQ	53.75	40.00	
2005-08-09	PQ	53.75	27.00	
2005-08-16	PQ	58.25	40.00	
2005-08-19	PQ	76.50	40.00	

TABLE G18. Additional Available Lemon Data

Crop	Market	First Report	Last Report	Number of Observations
Lemon	Boston	10/19/2004	3/24/2009	367
Lemon	Chicago	12/6/2004	2/12/2008	196
Lemon	Los Angeles	2/5/2008	3/24/2009	101
Lemon	Philadelphia	10/14/2004	3/24/2009	363
Lemon	San Francisco	10/25/2004	3/24/2009	404
Lemon	Seattle	10/20/2004	3/24/2009	327

TABLE G19. Commodity Pricing Data for Minneapolis Oats: Feed Grade, Bushel
Below is only a sample of the data; see link to full dataset (Table G19 Data)

Date	Quality	Organic Price	Conventional Price
2004-11-02	PQ		1.56
2004-11-15	PQ		1.56
2004-11-22	PQ		1.65
2004-11-30	PQ		1.71
2004-12-07	PQ		1.80
2004-12-14	PQ		1.80
2004-12-21	PQ		1.84
2004-12-28	PQ		1.84
2005-01-05	PQ		1.86
2005-01-11	PQ		1.92
2005-01-19	PQ		1.94
2005-01-25	PQ		1.94
2005-02-01	PQ		1.93
2005-02-08	PQ		1.86
2005-02-15	PQ		1.84
2005-02-22	PQ		2.02
2005-03-01	PQ		1.82
2005-03-08	PQ		1.83
2005-03-15	PQ		1.86
2005-03-22	PQ		1.81
2005-03-29	PQ		1.84
2005-04-05	PQ		1.82
2005-04-12	PQ		1.86
2005-04-19	PQ		1.81
2005-04-26	PQ		1.81
2005-05-03	PQ		1.63
2005-05-10	PQ		1.58
2005-05-17	PQ		1.60
2005-05-24	PQ		1.61
2005-05-31	PQ		1.60
2005-06-07	PQ		1.66
2005-06-16	PQ		1.77
2005-06-21	PQ		1.80
2005-06-28	PQ		1.75
2005-07-06	PQ		1.93
2005-07-12	PQ		1.94
2005-07-19	PQ		1.95
2005-07-26	PQ		1.88
2005-08-03	PQ		1.81
2005-08-09	PQ		1.88
2005-08-16	PQ		1.79
2005-08-17	PQ		1.78
2005-08-30	PQ		1.71

TABLE G20. Additional Available Oat Data

Crop	Market	First Report	Last Report	Number of Observations
Oats: Feed Grade	Chicago	10/19/2004	3/26/2009	108
Oats: Feed Grade	Dallas	9/10/2008	3/26/2009	27
Oats: Feed Grade	Detroit	1/30/2007	3/26/2009	103
Oats: Feed Grade	Fargo	10/19/2004	3/26/2009	265
Oats: Feed Grade	Minneapolis	11/2/2004	3/26/2009	298
Oats: Feed Grade	Omaha	3/27/2007	3/26/2009	95
Oats: Feed Grade	San Francisco	12/14/2004	3/26/2009	238
Oats: Feed Grade	Seattle	2/21/2003	3/26/2009	473
Oats: Food Grade	Chicago	10/19/2004	11/30/2004	12
Oats: Food Grade	Dallas	10/26/2004	12/28/2004	13
Oats: Food Grade	Fargo	10/19/2004	3/29/2005	25
Oats: Food Grade	Seattle	2/21/2003	9/23/2004	82

TABLE G21. Wholesale Pricing Data for Boston Onions: Yellow Medium
Below is only a sample of the data; see link to full dataset (Table G21 Data)

Wholesale Pricing for Boston Onions: Yellow Medium

Date	Unit	Quality	Organic Price	Conventional Price	Notes
2004-10-26	50#	PQ	33.00	15.00	
2004-11-01	40#	PQ	24.75	15.00	
2004-11-15	40#	PQ	24.75	16.00	
2004-11-23	40#	PQ	25.50	16.00	
2004-11-30	40#	PQ	25.50		
2004-12-06	40#	PQ	28.25		
2004-12-14	40#	PQ	28.25		
2004-12-21	40#	PQ	29.25	21.00	
2004-12-28	40#	PQ	29.25	21.00	
2005-01-05	40#	PQ	31.50	8.00	
2005-01-11	40#	PQ	30.25		
2005-01-19	40#	PQ	31.75		
2005-01-25	40#	PQ	32.25		
2005-02-01	40#	PQ	32.25		
2005-02-08	40#	PQ	32.25	20.00	
2005-02-15	40#	PQ	32.25		
2005-02-22	40#	PQ	33.25		
2005-03-01	40#	PQ	33.50		
2005-03-08	40#	PQ	33.25		
2005-03-15	40#	PQ	34.50		
2005-03-22	40#	PQ	27.00	8.00	organic price for large size; conventional price for 50#
2005-03-29	40#	PQ	34.50	8.00	
2005-04-05	40#	PQ	34.50		
2005-04-12	40#	PQ	34.50		
2005-04-19	40#	PQ	34.50		
2005-04-26	40#	PQ	36.25		
2005-05-03	40#	PQ	37.75		
2005-05-10	40#	PQ	37.75		
2005-05-17	40#	PQ	37.75		
2005-05-24	40#	PQ	37.75		
2005-05-31	40#	PQ	34.50		
2005-06-07	40#	PQ	33.25		
2005-06-16	40#	PQ	47.25		organic price for jumbo size
2005-06-21	40#	PQ		16.00	conventional price for jumbo size
2005-06-28	40#	PQ	35.75	16.00	conventional price for jumbo size
2005-07-06	40#	PQ	35.75	20.00	conventional price for jumbo size
2005-07-12	40#	PQ	35.75	22.00	conventional price for jumbo size
2005-07-19	40#	PQ	35.75		
2005-08-03	40#	PQ	33.75		
2005-08-09	40#	PQ	35.25		
2005-08-16	40#	PQ	35.25		
2005-08-19	40#	PQ	35.25	30.00	conventional price for jumbo size

TABLE G22. Additional Available Onion Data

Crop	Market	First Report	Last Report	Number of Observations
Onions, Green	Boston	3/5/2003	3/24/2009	425
Onions, Green	Chicago	12/6/2004	2/12/2008	296
Onions, Green	Los Angeles	2/5/2008	3/24/2009	104
Onions, Green	Philadelphia	10/20/2004	3/24/2009	256
Onions, Green	San Francisco	10/21/2004	3/24/2009	423
Onions, Green	Seattle	3/5/2003	3/24/2009	707
Onions, White Med	Boston	10/26/2004	2/20/2009	84
Onions, White Med	Chicago	12/6/2004	11/13/2007	44
Onions, White Med	Los Angeles	2/5/2008	3/24/2009	44
Onions, White Med	Philadelphia	10/25/2004	2/13/2009	90
Onions, White Med	San Francisco	10/25/2004	3/24/2009	187
Onions, White Med	Seattle	11/2/2004	3/5/2009	113
Onions, Yellow Med	Boston	10/26/2004	3/24/2009	260
Onions, Yellow Med	Chicago	12/6/2004	11/26/2007	76
Onions, Yellow Med	Los Angeles	2/5/2008	3/24/2009	60
Onions, Yellow Med	Philadelphia	10/25/2004	3/24/2009	261
Onions, Yellow Med	San Francisco	10/25/2004	3/24/2009	253
Onions, Yellow Med	Seattle	10/25/2004	3/24/2009	247

TABLE G23. Wholesale Pricing Data for Boston Oranges: Valencia
Below is only a sample of the data; see link to full dataset (Table G23 Data)

Wholesale Pricing for Boston Oranges: Valencia

Date	Unit	Quality	Organic Price	Conventional Price	Notes
2003-02-20	72 Ct	PQ		13.00	
2003-02-20	72 Ct	RQ		12.00	
2003-02-25	72 Ct N	PQ		13.00	
2003-02-25	72 Ct	RQ		12.00	
2003-03-17	72 Ct N	PQ	18.00	13.00	
2003-03-17	72 Ct	RQ		12.00	
2003-03-24	72 Ct N	PQ		11.00	
2003-03-24	72 Ct	RQ		10.00	
2003-03-31	72 Ct N	PQ		12.00	
2003-03-31	72 Ct	RQ		11.00	
2003-04-08	72 Ct N	PQ		15.00	
2003-04-08	72 Ct	RQ		13.00	
2003-04-29	72 Ct N	PQ		30.00	
2003-04-29	72 Ct	RQ		27.00	
2003-05-07	72 Ct N	PQ		18.00	
2003-05-07	72 Ct	RQ		15.00	
2003-05-13	72 Ct N	PQ		17.00	
2003-05-13	72 Ct	RQ		16.00	
2003-05-20	72 Ct N	PQ		11.00	
2003-05-20	72 Ct	RQ		10.00	
2003-06-10	72 Ct N	PQ		16.50	
2003-06-10	72 Ct N	RQ		16.00	
2003-06-16	72 Ct N	PQ	16.00	12.50	
2003-06-16	72 Ct N	RQ	13.50	11.00	
2003-06-24	72 Ct N	PQ		13.00	
2003-07-01	72 Ct N	PQ	22.00	18.00	
2003-07-01	72 Ct N	RQ		16.00	
2003-07-08	72 Ct N	PQ	22.00	18.00	
2003-07-08	72 Ct N	RQ		16.00	
2003-07-14	72 Ct N	PQ	22.00	14.00	
2003-07-14	72 Ct N	RQ		13.00	
2003-07-25	72 Ct N	PQ	23.50	17.00	
2003-07-25	72 Ct N	RQ		16.00	
2003-07-29	72 Ct N	PQ	23.50	17.00	
2003-07-29	72 Ct N	RQ		16.00	
2003-08-04	72 Ct N	PQ	22.00	17.50	
2003-08-04	72 Ct N	RQ		16.00	
2003-08-12	72 Ct N	PQ	23.00	17.00	
2003-08-12	72 Ct N	RQ		16.00	
2003-08-19	72 Ct N	PQ	23.00	17.00	
2003-08-19	72 Ct N	RQ		16.50	
2003-08-26	72 Ct N	PQ	23.00	17.00	

TABLE G24. Additional Available Orange Data

Crop	Market	First Report	Last Report	Number of Observations
Oranges: Valencia	Boston	2/20/2003	3/24/2009	409
Oranges: Valencia	Chicago	3/13/2007	11/20/2007	161
Oranges: Valencia	Los Angeles	4/29/2008	3/24/2009	45
Oranges: Valencia	Philadelphia	10/14/2004	3/24/2009	213
Oranges: Valencia	San Francisco	10/21/2004	3/24/2009	285
Oranges: Valencia	Seattle	2/20/2003	3/24/2009	455

TABLE G25. Wholesale Pricing Data for Boston Pears: Bartlett
Below is only a sample of the data; see link to full dataset (Table G25 Data)

Wholesale Pricing for Boston Pears: Bartlett

Date	Unit	Quality	Organic Price	Conventional Price	Notes
2004-10-19	90 Ct	PQ	44.00	26.00	
2004-10-26	45#	PQ	32.00	26.00	
2004-11-01	90 Ct	PQ	44.00	26.00	
2004-11-15	90 Ct	PQ		26.00	
2004-11-23	90 Ct	PQ		26.00	
2004-11-30	90 Ct	PQ		28.00	
2004-12-06	90 Ct	PQ	44.00	28.00	
2004-12-14	90 Ct	PQ		32.00	
2005-01-05	90 Ct	PQ		32.00	
2005-01-11	90 Ct	PQ		30.00	conventional price for 100 Ct
2005-02-15	90 Ct	PQ		27.00	
2005-02-22	90 Ct	PQ	39.50	25.00	
2005-03-01	90 Ct	PQ	40.00	25.00	
2005-03-08	90 Ct	PQ	39.50	25.00	
2005-03-15	90 Ct	PQ	35.50	26.00	
2005-03-22	90 Ct	PQ	35.50	23.00	
2005-03-29	90 Ct	PQ		22.00	
2005-04-05	90 Ct	PQ	19.75	23.00	
2005-04-12	90 Ct	PQ	19.75	22.00	
2005-04-19	90 Ct	PQ	19.75	22.00	
2005-04-26	90 Ct	PQ		22.00	
2005-05-10	90 Ct	PQ		24.00	
2005-05-17	90 Ct	PQ		24.00	
2005-05-31	90 Ct	PQ		25.00	
2005-06-07	90 Ct	PQ		25.00	
2005-06-16	90 Ct	PQ		25.00	
2005-06-21	90 Ct	PQ		25.00	
2005-06-28	90 Ct	PQ		25.00	
2005-07-06	90 Ct	PQ		26.00	
2005-07-19	90 Ct	PQ		36.00	
2005-07-26	90 Ct	PQ		35.00	
2005-08-03	90 Ct	PQ		32.00	
2005-08-09	90 Ct	PQ	65.00	32.00	organic price for 100 Ct
2005-08-16	90 Ct	PQ	65.00	32.00	organic price for 100 Ct
2005-08-19	90 Ct	PQ		32.00	
2005-08-30	90 Ct	PQ	55.00	32.00	
2005-09-07	90 Ct	PQ	50.00	32.00	
2005-09-14	90 Ct	PQ	55.00	32.00	
2005-09-20	90 Ct	PQ	57.75	32.00	
2005-09-28	90 Ct	PQ	38.75	32.00	

TABLE G26. Additional Available Pear Data

Crop	Market	First Report	Last Report	Number of Observations
Peaches	Boston	7/1/2003	6/27/2006	103
Peaches	Philadelphia	4/19/2005	6/13/2006	8
Peaches	San Francisco	3/15/2005	1/23/2007	33
Peaches	Seattle	5/13/2003	9/6/2006	134
Pears: Bartlett	Boston	10/19/2004	3/24/2009	233
Pears: Bartlett	Chicago	12/6/2004	2/12/2008	129
Pears: Bartlett	Los Angeles	2/5/2008	3/24/2009	47
Pears: Bartlett	Philadelphia	10/14/2004	3/24/2009	207
Pears: Bartlett	San Francisco	10/21/2004	3/24/2009	133
Pears: Bartlett	Seattle	10/20/2004	3/24/2009	219
Pears: Bosc	Boston	10/19/2004	3/24/2009	235
Pears: Bosc	Chicago	12/6/2004	2/12/2008	217
Pears: Bosc	Los Angeles	2/5/2008	3/24/2009	22
Pears: Bosc	Philadelphia	10/14/2004	3/24/2009	148
Pears: Bosc	San Francisco	10/21/2004	3/24/2009	213
Pears: Bosc	Seattle	10/20/2004	3/24/2009	308
Pears: Danjou	Boston	2/20/2003	3/24/2009	470
Pears: Danjou	Chicago	12/6/2004	2/12/2008	171
Pears: Danjou	Los Angeles	2/5/2008	3/24/2009	54
Pears: Danjou	Philadelphia	10/14/2004	3/24/2009	311
Pears: Danjou	San Francisco	10/21/2004	3/24/2009	239
Pears: Danjou	Seattle	2/20/2003	3/24/2009	573

TABLE G27. Wholesale Pricing Data for San Francisco Peppermint, 1 Dozen
Below is only a sample of the data; see link to full dataset (Table G27 Data)

Wholesale Pricing for San Francisco Peppermint, 1 Dozen

Date	Quality	Organic Price	Conventional Price
2004-12-14	PQ	12.00	
2004-12-21	PQ	12.00	
2004-12-28	PQ	12.00	
2005-01-05	PQ	12.00	
2005-01-11	PQ	12.00	
2005-01-19	PQ	12.00	
2005-01-25	PQ	12.00	
2005-02-01	PQ	12.00	
2005-03-08	PQ	12.00	
2005-03-15	PQ	12.00	
2005-03-22	PQ	12.00	
2005-03-29	PQ	12.00	
2005-04-05	PQ	12.00	
2005-04-12	PQ	12.00	
2005-04-19	PQ	12.00	
2005-04-26	PQ	12.00	
2005-05-03	PQ	12.00	
2005-05-10	PQ	12.00	
2005-05-17	PQ	12.00	
2005-05-24	PQ	12.00	
2005-05-31	PQ	12.00	
2005-06-07	PQ	12.00	
2005-06-16	PQ	12.00	
2005-06-21	PQ	12.00	
2005-06-28	PQ	12.00	
2005-07-06	PQ	12.00	
2005-07-12	PQ	12.00	
2005-07-19	PQ	12.00	
2005-07-26	PQ	12.00	
2005-08-03	PQ	12.00	
2005-08-09	PQ	12.00	
2005-08-16	PQ	12.00	
2005-08-19	PQ	12.00	

TABLE G28. Additional Available Peppermint Data

Crop	Market	First Report	Last Report	Number of Observations
Peppermint	Boston	9/30/2003	12/6/2004	65
Peppermint	San Francisco	12/14/2004	1/15/2009	117
Peppermint	Seattle	9/30/2003	8/21/2007	206

TABLE G29. Wholesale Pricing Data for Boston Peppers: Bell, Green Medium
Below is only a sample of the data; see link to full dataset (Table G29 Data)

Wholesale Pricing for Boston Peppers: Bell, Green Medium

Date	Unit	Quality	Organic Price	Conventional Price	Notes
2003-03-05	25#	PQ		17.00	
2003-03-05	25#	RQ		16.00	
2003-03-10	25#	PQ	26.00	12.00	
2003-03-10	25#	RQ	22.00	8.00	
2003-03-17	25#	PQ	26.00	16.00	
2003-03-17	25#	RQ	22.00	14.00	
2003-03-24	25#	PQ	26.00	15.00	
2003-03-24	25#	RQ	22.00	14.00	
2003-03-31	25#	PQ		12.00	
2003-03-31	25#	RQ		10.00	
2003-04-08	25#	PQ		8.00	
2003-04-08	25#	RQ		7.00	
2003-04-15	25#	PQ		10.00	
2003-04-15	25#	RQ		9.00	
2003-04-22	25#	PQ		28.00	
2003-05-07	25#	PQ		28.00	
2003-05-07	25#	RQ		18.00	
2003-05-13	25#	PQ		27.00	
2003-05-13	25#	RQ		25.00	
2003-05-20	25#	PQ		13.00	
2003-05-20	25#	RQ		12.00	
2003-06-03	25#	PQ		16.00	
2003-06-03	25#	RQ		15.00	
2003-06-09	25#	PQ		22.00	
2003-06-09	25#	RQ		18.00	
2003-06-16	25#	PQ		14.00	
2003-06-16	25#	RQ		13.00	
2003-07-01	25#	PQ	26.50	13.00	
2003-07-01	25#	RQ		12.00	
2003-07-08	25#	PQ	26.50	24.00	
2003-07-08	25#	RQ		23.00	
2003-07-14	25#	PQ	24.00	24.00	
2003-07-14	25#	RQ		22.00	
2003-07-25	25#	PQ	22.25	22.00	

TABLE G30. Additional Available Bell Pepper Data

Crop	Market	First Report	Last Report	Number of Observations
Peppers: Bell, Green Med	Boston	3/5/2003	3/24/2009	550
Peppers: Bell, Green Med	Chicago	12/6/2004	2/12/2008	194
Peppers: Bell, Green Med	Los Angeles	2/5/2008	3/24/2009	64
Peppers: Bell, Green Med	Philadelphia	10/20/2004	3/24/2009	330
Peppers: Bell, Green Med	San Francisco	10/21/2004	3/24/2009	261
Peppers: Bell, Green Med	Seattle	3/5/2003	3/24/2009	557
Peppers: Bell, Yellow, Med	Boston	10/20/2004	3/24/2009	262
Peppers: Bell, Yellow, Med	Chicago	2/6/2007	2/12/2008	120
Peppers: Bell, Yellow, Med	Los Angeles	2/5/2008	3/24/2009	33
Peppers: Bell, Yellow, Med	Philadelphia	10/20/2004	3/24/2009	203
Peppers: Bell, Yellow, Med	San Francisco	10/21/2004	3/24/2009	165
Peppers: Bell, Yellow, Med	Seattle	10/19/2004	3/24/2009	216

TABLE G31. Wholesale Pricing Data for Boston Plums: Black, 28 Pound
Below is only a sample of the data; see link to full dataset (Table G31 Data)

Wholesale Pricing for Boston Plums: Black, 28 Pound

Date	Quality	Organic Price	Conventional Price	Notes
2003-06-16	PQ		20.00	prices not currently available
2003-06-16	RQ		19.00	
2003-06-24	PQ		35.00	prices not currently available
2003-07-01	PQ	57.00	35.00	
2003-07-01	RQ	29.00	33.00	
2003-07-08	PQ	57.00	24.00	
2003-07-08	RQ	29.00	21.00	
2003-07-14	PQ	53.00	24.00	
2003-07-14	RQ		20.00	
2003-07-25	PQ	32.00	21.00	
2003-07-25	RQ		19.00	
2003-07-29	PQ	36.00		
2003-07-29	RQ	33.15		
2003-08-04	PQ	27.00	18.00	
2003-08-04	RQ		16.00	
2003-08-12	PQ	28.00	18.00	
2003-08-12	RQ	24.00	14.00	
2003-08-19	PQ	28.00	18.00	
2003-08-19	RQ	24.00	14.00	
2003-08-26	PQ	29.00	18.00	
2003-08-26	RQ	18.50	16.00	
2003-09-03	PQ	29.00	18.00	
2003-09-03	RQ	18.50	14.00	
2003-09-09	PQ	29.00	16.00	
2003-09-09	RQ	18.50	12.00	
2003-09-15	PQ	28.50	15.00	
2003-09-15	RQ		13.00	
2003-09-23	PQ	28.00		
2003-09-23	RQ	27.00		
2003-09-29	PQ	27.50		
2003-09-29	RQ	23.00		
2003-10-06	PQ	23.00	17.00	
2003-10-06	RQ	21.50	16.00	
2003-10-15	PQ	24.00	16.00	
2003-10-15	RQ		14.00	
2003-10-20	PQ	24.00	16.00	

TABLE G32. Additional Available Plum Data

Crop	Market	First Report	Last Report	Number of Observations
Plums: Black	Boston	6/16/2003	11/18/2008	255
Plums: Black	Los Angeles	9/10/2008	11/25/2008	14
Plums: Black	Philadelphia	3/15/2005	12/30/2008	97
Plums: Black	San Francisco	5/24/2005	11/4/2008	97
Plums: Black	Seattle	2/20/2003	10/14/2008	236

TABLE G33. Wholesale Pricing Data for Boston Potatoes: Russet
Below is only a sample of the data; see link to full dataset (Table G33 Data)

Wholesale Pricing for Boston Potatoes: Russet

Date	Unit	Quality	Organic Price	Conventional Price	Notes
2003-03-10	70 Ct	PQ	19.95		
2003-03-24	70 Ct	PQ		12.50	no prices available
2003-03-24	70 Ct	RQ		11.00	
2003-03-31	70 Ct	PQ		12.50	no prices available
2003-03-31	70 Ct	RQ		11.00	
2003-04-15	70 Ct	PQ		10.50	thin availability of conventional
2003-04-15	70 Ct	RQ		10.00	
2003-04-29	70 Ct	PQ		12.00	thin availability of conventional
2003-04-29	70 Ct	RQ		11.50	
2003-05-07	70 Ct	PQ		11.00	thin availability of conventional
2003-05-07	70 Ct	RQ		10.00	
2003-05-13	70 Ct	PQ		12.50	thin availability of conventional
2003-05-13	70 Ct	RQ		10.00	
2003-06-09	70 Ct	PQ		10.50	thin availability of conventional
2003-06-09	70 Ct	RQ		9.50	
2003-06-16	70 Ct	PQ	36.00	13.00	thin availability of conventional
2003-06-16	70 Ct	RQ	22.00	12.50	
2003-06-24	70 Ct	PQ	26.00	12.00	thin availability of conventional
2003-07-01	70 Ct	PQ	26.00	12.00	thin availability of conventional
2003-07-08	70 Ct	PQ	26.00	12.00	thin availability of conventional
2003-07-08	70 Ct	RQ	36.00	11.50	
2003-07-25	70 Ct	PQ	44.00	12.00	thin availability of conventional
2003-07-25	70 Ct	RQ		11.00	
2003-07-29	70 Ct	PQ	44.00	12.00	thin availability of conventional
2003-07-29	70 Ct	RQ	43.00	11.00	
2003-08-04	70 Ct	PQ	24.00	12.00	thin availability of conventional
2003-08-04	70 Ct	RQ		10.00	
2003-08-12	70 Ct	PQ	24.00	12.00	thin availability of conventional
2003-08-12	70 Ct	RQ		11.00	
2003-08-19	70 Ct	PQ	24.00	12.00	thin availability of conventional
2003-08-19	70 Ct	RQ		11.00	
2003-08-26	70 Ct	PQ	29.50	16.00	thin availability of conventional
2003-08-26	70 Ct	PQ	25.00		thin availability of conventional
2003-08-26	70 Ct	RQ		15.00	
2003-09-03	70 Ct	PQ	29.50	16.00	thin availability of conventional

TABLE G34. Additional Available Potato Data

Crop	Market	First Report	Last Report	Number of Observations
Potato: Red A	Boston	10/20/2004	3/24/2009	423
Potato: Red A	Chicago	12/6/2004	2/12/2008	300
Potato: Red A	Los Angeles	2/5/2008	3/24/2009	98
Potato: Red A	Philadelphia	10/20/2004	3/24/2009	417
Potato: Red A	San Francisco	10/21/2004	3/24/2009	429
Potato: Red A	Seattle	10/19/2004	3/24/2009	428
Potato: Yellow A	Boston	4/15/2003	3/24/2009	269
Potato: Yellow A	Los Angeles	2/5/2008	3/24/2009	71
Potato: Yellow A	Philadelphia	5/17/2005	6/5/2007	2
Potato: Yellow A	San Francisco	11/23/2004	2/13/2009	165
Potato: Yellow A	Seattle	3/10/2003	4/1/2008	231
Potato: Yukon Gold Baker A	Boston	10/20/2004	3/24/2009	386
Potato: Yukon Gold Baker A	Chicago	12/6/2004	2/12/2008	236
Potato: Yukon Gold Baker A	Los Angeles	2/12/2008	1/22/2009	29
Potato: Yukon Gold Baker A	Philadelphia	10/20/2004	3/24/2009	400
Potato: Yukon Gold Baker A	San Francisco	10/21/2004	3/24/2009	333
Potato: Yukon Gold Baker A	Seattle	10/19/2004	3/24/2009	423
Potatoes: Russet	Boston	3/10/2003	3/24/2009	500
Potatoes: Russet	Chicago	12/6/2004	2/12/2008	266
Potatoes: Russet	Los Angeles	2/5/2008	3/24/2009	95
Potatoes: Russet	Philadelphia	10/20/2004	3/24/2009	303
Potatoes: Russet	San Francisco	10/21/2004	3/24/2009	413
Potatoes: Russet	Seattle	3/5/2003	3/24/2009	628

TABLE G35. Commodity Pricing Data for Fargo Soybeans: Feed Stock, Bushel
Below is only a sample of the data; see link to full dataset (Table G35 Data)

Wholesale Pricing for Fargo Soybeans: Feed Stock, Bushel

Date	Quality	Organic Price	Conventional Price
2004-10-19	PQ	15.00	
2004-10-19	RQ	12.00	
2004-10-26	PQ	15.00	4.92
2004-10-26	RQ	12.00	
2004-11-02	PQ	15.00	4.68
2004-11-02	RQ	14.00	
2004-11-15	PQ	15.00	4.82
2004-11-15	RQ	14.00	
2004-11-22	PQ	15.00	5.43
2004-11-22	RQ	14.00	
2004-11-30	PQ	15.00	5.43
2004-11-30	RQ	14.00	
2004-12-07	PQ	15.00	4.96
2004-12-07	RQ	14.00	
2004-12-14	PQ	15.00	5.14
2004-12-14	RQ	14.00	
2004-12-21	PQ	15.00	5.36
2004-12-21	RQ	14.00	
2004-12-28	PQ	15.00	5.36
2004-12-28	RQ	14.00	
2005-01-05	PQ	15.00	5.16
2005-01-11	PQ	15.00	5.39
2005-01-19	PQ	15.00	5.09
2005-01-25	PQ	15.00	5.14
2005-02-01	PQ		5.04
2005-02-08	PQ		4.99
2005-02-15	PQ	13.00	5.32
2005-02-22	PQ	13.00	5.57
2005-03-01	PQ	13.00	5.86
2005-03-08	PQ	13.00	5.81
2005-03-15	PQ	13.00	6.20
2005-03-22	PQ		5.88
2005-03-29	PQ		5.90
2005-04-05	PQ	13.00	5.84
2005-04-12	PQ	13.00	5.93

TABLE G36. Additional Available Soybean Data

Crop	Market	First Report	Last Report	Number of Observations
Soybeans: Feed Stock	Chicago	10/19/2004	3/26/2009	218
Soybeans: Feed Stock	Dallas	10/20/2004	3/26/2009	436
Soybeans: Feed Stock	Detroit	10/20/2004	3/26/2009	439
Soybeans: Feed Stock	Fargo	10/19/2004	3/26/2009	443
Soybeans: Feed Stock	Minneapolis	10/19/2004	3/26/2009	400
Soybeans: Feed Stock	Omaha	10/20/2004	3/26/2009	438
Soybeans: Feed Stock	San Francisco	10/26/2004	3/26/2009	220
Soybeans: Feed Stock	Seattle	2/21/2003	3/26/2009	468
Soybeans: Tofu Type	Chicago	10/19/2004	3/26/2009	119
Soybeans: Tofu Type	Dallas	10/26/2004	3/26/2009	109
Soybeans: Tofu Type	Detroit	10/20/2004	3/26/2009	220
Soybeans: Tofu Type	Fargo	10/19/2004	3/26/2009	228
Soybeans: Tofu Type	Minneapolis	10/19/2004	3/26/2009	221
Soybeans: Tofu Type	Omaha	3/27/2007	3/26/2009	95
Soybeans: Tofu Type	San Francisco	10/26/2004	3/26/2009	216
Soybeans: Tofu Type	Seattle	2/21/2003	3/26/2009	385

TABLE G37. Wholesale Pricing Data for Seattle Spearmint, 1 Dozen
Below is only a sample of the data; see link to full dataset (Table G37 Data)

Wholesale Pricing for Seattle Spearmint, 1 Dozen

Date	Quality	Organic Price	Conventional Price
2003-10-06	PQ	12.00	
2003-10-15	PQ	12.00	
2003-10-20	PQ	12.00	
2003-10-28	PQ	12.00	
2003-11-03	PQ	12.00	
2003-11-10	PQ	12.00	
2003-11-17	PQ	12.00	
2003-11-24	PQ	12.00	
2003-12-01	PQ	12.00	
2003-12-08	PQ	12.00	8.00
2003-12-15	PQ	12.00	8.00
2003-12-22	PQ	12.00	8.00
2003-12-30	PQ	12.00	8.00
2004-01-06	PQ	12.00	8.00
2004-01-12	PQ	12.00	8.00
2004-01-20	PQ	12.00	8.00
2004-01-26	PQ	12.00	8.00
2004-02-02	PQ	12.00	8.00
2004-02-09	PQ	12.00	8.00
2004-02-17	PQ	12.00	8.00
2004-02-23	PQ	12.00	8.00
2004-03-01	PQ	12.00	8.00
2004-03-08	PQ	12.00	8.00
2004-03-15	PQ	12.00	8.00
2004-03-22	PQ	12.00	8.00
2004-03-29	PQ	12.00	
2004-04-05	PQ	12.00	
2004-04-12	PQ	12.00	
2004-04-19	PQ	12.00	
2004-04-26	PQ	12.00	
2004-05-03	PQ	12.00	
2004-05-10	PQ	12.00	
2004-05-17	PQ	12.00	
2004-05-24	PQ	12.00	
2004-06-01	PQ	12.00	

TABLE G38. Additional Available Spearmint Data

Crop	Market	First Report	Last Report	Number of Observations
Spearmint	Boston	10/6/2003	12/6/2004	43
Spearmint	Chicago	2/6/2007	10/16/2007	106
Spearmint	San Francisco	11/2/2004	3/24/2009	218
Spearmint	Seattle	10/6/2003	3/24/2009	250

TABLE G39. Wholesale Pricing Data for Boston Squash, Winter: Butternut 35 Pound Below is only a sample of the data; see link to full dataset (Table G39 Data)

Wholesale Pricing for Boston Squash, Winter: Butternut, 35 Pound

Date	Quality	Organic Price	Conventional Price	Notes
2004-10-20	PQ	16.25		
2004-10-26	PQ	18.25	14.00	
2004-11-01	PQ	17.50	10.00	
2004-11-15	PQ	22.00	12.00	
2004-11-23	PQ	22.00	12.00	
2004-11-30	PQ	24.00	11.00	
2004-12-06	PQ	26.75	12.00	
2004-12-14	PQ	26.75		
2004-12-21	PQ	28.25	20.00	
2004-12-28	PQ	31.50	15.00	
2005-01-05	PQ	31.50	22.00	
2005-01-11	PQ	33.25	16.00	
2005-01-19	PQ	34.50	16.00	
2005-01-25	PQ	34.50	18.00	
2005-02-01	PQ	30.25	18.00	
2005-02-08	PQ	30.25	24.00	
2005-02-15	PQ	31.75	16.00	
2005-02-22	PQ	32.50	16.00	
2005-03-01	PQ	33.00	16.00	
2005-03-08	PQ	32.50	22.00	
2005-03-15	PQ	33.75	16.00	
2005-03-22	PQ		16.00	
2005-03-29	PQ		18.00	
2005-04-05	PQ		20.00	
2005-04-12	PQ		20.00	
2005-04-19	PQ		20.00	
2005-04-26	PQ		22.00	
2005-05-03	PQ		20.00	
2005-05-10	PQ		19.00	
2005-05-17	PQ		20.00	
2005-05-24	PQ	44.00	27.00	
2005-05-31	PQ	46.00	27.00	
2005-06-07	PQ	46.00	28.00	
2005-06-16	PQ	46.00	27.00	
2005-06-21	PQ		26.00	

TABLE G40. Additional Available Winter Squash Data

Crop	Market	First Report	Last Report	Number of Observations
Squash, Winter: Acorn	Boston	10/20/2004	3/24/2009	370
Squash, Winter: Acorn	Chicago	12/6/2004	2/12/2008	280
Squash, Winter: Acorn	Los Angeles	2/5/2008	3/24/2009	96
Squash, Winter: Acorn	Philadelphia	10/20/2004	3/24/2009	312
Squash, Winter: Acorn	San Francisco	10/21/2004	3/24/2009	399
Squash, Winter: Acorn	Seattle	10/19/2004	3/24/2009	418
Squash, Winter: Butternut	Boston	10/20/2004	3/24/2009	348
Squash, Winter: Butternut	Chicago	12/6/2004	2/12/2008	287
Squash, Winter: Butternut	Los Angeles	2/5/2008	3/24/2009	101
Squash, Winter: Butternut	Philadelphia	10/20/2004	3/24/2009	286
Squash, Winter: Butternut	San Francisco	10/21/2004	3/24/2009	414
Squash, Winter: Butternut	Seattle	10/19/2004	3/24/2009	371
Squash, Winter: Spaghetti	Boston	10/20/2004	3/24/2009	357
Squash, Winter: Spaghetti	Chicago	12/6/2004	2/12/2008	281
Squash, Winter: Spaghetti	Los Angeles	2/5/2008	3/24/2009	94
Squash, Winter: Spaghetti	Philadelphia	10/20/2004	3/24/2009	288
Squash, Winter: Spaghetti	San Francisco	10/21/2004	3/24/2009	399
Squash, Winter: Spaghetti	Seattle	10/19/2004	3/24/2009	410

TABLE G41. Wholesale Pricing Data for Boston Strawberries, 8/1 Pound
Below is only a sample of the data; see link to full dataset (Table G41 Data)

Wholesale Pricing for Boston Strawberries, 8 / 1 Pound

Date	Quality	Organic Price	Conventional Price	Notes
2003-02-20	PQ		18.00	conventional: offerings light
2003-02-20	RQ		19.00	conventional: offerings light
2003-02-25	PQ		13.00	conventional: offerings light
2003-02-25	RQ		12.00	
2003-03-03	PQ		12.00	conventional: offerings light
2003-03-03	RQ		11.00	
2003-03-10	PQ		10.00	conventional: offerings light
2003-03-10	RQ		9.00	
2003-03-17	PQ		11.00	
2003-03-17	RQ		10.00	
2003-03-24	PQ		12.00	
2003-03-24	RQ		10.00	
2003-03-31	PQ		15.00	
2003-03-31	RQ		14.00	
2003-04-08	PQ		12.00	
2003-04-08	RQ		9.00	
2003-04-15	PQ		14.00	
2003-04-15	RQ		12.00	
2003-04-22	PQ		13.00	
2003-04-22	RQ		11.00	
2003-04-29	PQ		10.00	
2003-04-29	RQ		9.00	
2003-05-07	PQ		12.00	
2003-05-07	RQ		11.00	
2003-05-13	PQ		15.00	
2003-05-13	RQ		14.00	
2003-05-20	PQ		10.00	
2003-05-20	RQ		9.00	
2003-05-27	PQ		12.00	
2003-05-27	RQ		10.00	
2003-06-03	PQ		11.00	
2003-06-03	RQ		9.00	
2003-06-10	PQ		12.00	
2003-06-10	RQ		8.00	
2003-06-16	PQ	12.85	11.00	

TABLE G42. Additional Available Strawberry Data

Crop	Market	First Report	Last Report	Number of Observations
Strawberries	Boston	2/20/2003	3/24/2009	598
Strawberries	Chicago	12/6/2004	2/12/2008	232
Strawberries	Los Angeles	2/5/2008	3/24/2009	94
Strawberries	Philadelphia	10/14/2004	3/24/2009	352
Strawberries	San Francisco	10/21/2004	3/24/2009	353
Strawberries	Seattle	2/20/2003	3/24/2009	665

TABLE G43. Wholesale Pricing Data for San Francisco Tomatoes, 2 Layers 4x5
Below is only a sample of the data; see link to full dataset (Table G43 Data)

Wholesale Pricing for San Francisco Tomatoes, 2 Layers 4x5

Date	Quality	Organic Price	Conventional Price	Notes
2004-10-21	PQ	39.95	31.00	
2004-10-25	PQ	36.00	30.00	
2004-11-02	PQ	39.95	25.50	
2004-11-16	PQ	54.00	47.00	
2004-11-23	PQ	54.00	48.00	
2004-11-30	PQ	60.00	43.50	
2004-12-07	PQ	56.00	32.50	
2004-12-14	PQ	50.00	24.50	
2004-12-21	PQ	40.00	18.50	
2004-12-28	PQ	34.00	14.50	
2005-01-05	PQ	32.00	12.50	cert price for 2 layers 4x4
2005-01-11	PQ	27.00	10.00	
2005-01-19	PQ	24.00	9.50	
2005-01-25	PQ	28.00	9.00	
2005-02-01	PQ	27.00	9.00	
2005-02-08	PQ	22.00	9.00	
2005-02-15	PQ	27.00	16.50	
2005-02-22	PQ	28.00	18.00	
2005-03-01	PQ	37.50	12.50	
2005-03-08	PQ	27.00	14.00	
2005-03-15	PQ	34.00	14.50	
2005-03-22	PQ	41.00	17.00	
2005-03-29	PQ	52.00	17.00	
2005-04-05	PQ		19.50	
2005-04-12	PQ	48.00	23.00	
2005-04-19	PQ	48.00	29.50	
2005-04-26	PQ	48.00	34.00	
2005-05-03	PQ	48.00	32.00	
2005-05-10	PQ	48.50	22.00	
2005-05-17	PQ	49.00	24.50	
2005-05-24	PQ	51.00	22.00	
2005-05-31	PQ	48.00	14.00	
2005-06-07	PQ	44.00	14.50	
2005-06-16	PQ	43.00	12.75	
2005-06-21	PQ	46.00	12.00	
2005-06-28	PQ	46.00	18.00	

TABLE G44. Additional Available Tomato Data

Crop	Market	First Report	Last Report	Number of Observations
Tomatoes	Boston	3/5/2003	3/12/2009	314
Tomatoes	Chicago	12/6/2004	2/12/2008	280
Tomatoes	Los Angeles	2/5/2008	3/24/2009	72
Tomatoes	Philadelphia	10/20/2004	3/12/2009	164
Tomatoes	San Francisco	10/21/2004	3/24/2009	411
Tomatoes	Seattle	3/5/2003	3/24/2009	553

TABLE G45. Wholesale Pricing Data for Boston Watermelon, Red Flesh Seedless Below is only a sample of the data; see link to full dataset (Table G45 Data)

Wholesale Pricing for Boston Watermelon, Red flesh seedless

Date	Unit	Quality	Organic Price	Conventional Price	Notes
2003-02-25	Type 5s/lb.	PQ		0.21	Conventional: offerings light
2003-02-25	Type 5s/lb.	RQ		0.14	
2003-03-03	Type 5s/lb.	PQ		0.30	Conventional: offerings light
2003-03-03	Type 5s/lb.	RQ		0.29	
2003-03-10	Type 5s/lb.	PQ		0.20	Conventional: offerings light
2003-03-10	Type 5s/lb.	RQ		0.17	
2003-03-17	Type 5s/lb.	PQ		0.43	
2003-03-17	Type 5s/lb.	RQ		0.30	
2003-03-24	Type 5s/lb.	PQ		0.29	
2003-03-24	Type 5s/lb.	RQ		0.25	
2003-03-31	Type 5s/lb.	PQ		0.29	
2003-03-31	Type 5s/lb.	RQ		0.27	
2003-04-08	Type 5s/lb.	PQ		0.21	
2003-04-15	Type 5s/lb.	PQ		0.26	
2003-04-15	Type 5s/lb.	RQ		0.25	
2003-04-29	Type 5s/lb.	PQ		0.25	
2003-05-07	Type 5s/lb.	PQ		0.29	
2003-05-07	Type 5s/lb.	RQ		0.28	
2003-05-13	Type 5s/lb.	PQ		0.26	
2003-05-13	Type 5s/lb.	RQ		0.25	
2003-05-20	Type 5s/lb.	PQ		0.29	
2003-05-20	Type 5s/lb.	RQ		0.26	
2003-05-27	Type 5s/lb.	PQ		0.20	
2003-05-27	Type 5s/lb.	RQ		0.19	
2003-06-03	Type 5s/lb.	PQ		0.19	
2003-06-10	Type 5s/lb.	PQ		0.14	
2003-06-16	Type 5s/lb.	PQ	0.26		
2003-06-16	Type 5s/lb.	RQ	0.20		

TABLE G46. Additional Available Watermelon Data

Crop	Market	First Report	Last Report	Number of Observations
Watermelon, Red flesh seedless	Boston	2/25/2003	3/19/2009	295
Watermelon, Red flesh seedless	Chicago	12/6/2004	2/12/2008	24
Watermelon, Red flesh seedless	Los Angeles	4/29/2008	7/30/2008	12
Watermelon, Red flesh seedless	Philadelphia	10/14/2004	3/24/2009	175
Watermelon, Red flesh seedless	San Francisco	10/21/2004	3/12/2009	91
Watermelon, Red flesh seedless	Seattle	2/20/2003	8/5/2008	252

TABLE G47. Commodity Pricing Data for Minneapolis Wheat, Hard Red, Bushel
Below is only a sample of the data; see link to full dataset (Table G47 Data)

Wholesale Pricing for Minneapolis Wheat, Hard Red, Bushel

Date	Quality	Organic Price	Conventional Price	Notes
2004-10-19	PQ	3.70	3.75	
2004-10-26	PQ	7.00	3.75	
2004-11-02	PQ	7.00	3.74	
2004-11-15	PQ	7.00	3.66	
2004-11-22	PQ	7.00	3.66	
2004-11-30	PQ	7.00	3.55	
2004-12-07	PQ	7.00	3.27	
2004-12-14	PQ	7.00	3.27	
2004-12-21	PQ	7.00		
2004-12-28	PQ	7.00		
2005-01-05	PQ	7.00	3.63	
2005-01-11	PQ	7.00	3.73	
2005-01-19	PQ	7.00	3.77	
2005-01-25	PQ	7.25	3.79	
2005-02-01	PQ	7.25	3.90	
2005-02-08	PQ	7.25	3.66	
2005-02-15	PQ	7.25	3.27	
2005-02-22	PQ	7.25	3.75	
2005-03-01	PQ	7.25	3.93	
2005-03-08	PQ	7.25	3.78	
2005-03-15	PQ	7.25	3.94	
2005-03-22	PQ	7.25	3.83	
2005-03-29	PQ	7.25		
2005-04-05	PQ	7.00	3.56	
2005-04-12	PQ	7.00	3.41	
2005-04-19	PQ	7.00	3.31	
2005-04-26	PQ	7.00	3.60	
2005-05-03	PQ	7.00	3.49	
2005-05-10	PQ	7.00	3.66	
2005-05-17	PQ	7.00	3.63	
2005-05-24	PQ	7.00	3.83	
2005-05-31	PQ	7.00	3.92	
2005-06-07	PQ	7.00	3.83	
2005-06-16	PQ	7.00	3.73	conventional price for 13% protein

TABLE G48. Additional Available Wheat Data

Crop	Market	First Report	Last Report	Number of Observations
Wheat: Hard Red	Chicago	10/19/2004	3/26/2009	119
Wheat: Hard Red	Dallas	10/26/2004	3/26/2009	225
Wheat: Hard Red	Detroit	11/2/2004	3/26/2009	303
Wheat: Hard Red	Fargo	10/19/2004	3/26/2009	402
Wheat: Hard Red	Minneapolis	10/19/2004	3/26/2009	418
Wheat: Hard Red	Omaha	11/2/2004	3/26/2009	321
Wheat: Hard Red	San Francisco	10/26/2004	3/26/2009	229
Wheat: Hard Red	Seattle	2/21/2003	3/26/2009	400

TABLE G49. Additional Available Data for Other Crops

Crop	Market	First Report	Last Report	Number of Observations
Beans, White Navy	Seattle	8/16/2004	8/16/2004	1
Cherries	Boston	6/24/2003	6/7/2004	13
Cherries	Seattle	6/24/2003	12/14/2004	23
Peaches	Boston	7/1/2003	6/27/2006	103
Peaches	Philadelphia	4/19/2005	6/13/2006	8
Peaches	San Francisco	3/15/2005	1/23/2007	33
Peaches	Seattle	5/13/2003	9/6/2006	134

Appendix H

Organic Cotton Pricing Data

TABLE H1. 2008 Organic Cotton Crop
Below is only a sample of the data; see link to full dataset (Table H1 Data)

The column labeled Farm No does not contain actual farm numbers but rather contain unique identifiers that allow farm level analysis.

2008 Organic Cotton Crop

Payments Received by Producers									
	Avg./Total	Pool 1	Pool 2	Pool 3	Pool 4	Pool 5	Trans 1-3	Trans 4	Trans 5
Bales	7,330	433	4,443	359	193	625	985	110	182
Pounds	3,635,061	213,236	2,202,241	179,867	95,784	311,233	487,502	55,011	90,187
Total Payment per Lb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Production by Farm									
Farm No.	Total Lbs.	Pool 1	Pool 2	Pool 3	Pool 4	Pool 5	Trans 1-3	Trans 4	Trans 5
2008-1	33,257	0	0	0	0	32,770			487
2008-2	72,806	1,040	51,448	6,948	5,959	7,411			
2008-3	22,296	0	0	1,029	505	20,762			
2008-4	91,636	1,443	55,948	13,627	1,990	18,628			
2008-5	37,242		13,469	4,871	984	17,918			
2008-6	92,910	993	41,588	22,369	16,008	11,952			
2008-7	99,498	2,515	59,550	7,571	8,049	487	20,802	524	
2008-8	28,590	994	27,596						
2008-9	28,840					28,840			
2008-10	70,681	1,522	28,213	12,722	17,112	11,112			
2008-11	67,881	12,382	46,015	0	0	9,484			
2008-12	23,884	450	0	0	0	23,434			
2008-13	29,144					29,144			
2008-14	95,231						1,012	24,088	70,131
2008-15	22,529		18,358	4,171					
2008-16	61,960	19,017	42,943	0	0	0			
2008-17	34,035	12,450	21,585	0	0	0			
2008-18	11,381	1,481	9,900	0	0	0			
2008-19	20,098	11,974	8,124	0	0	0			
2008-20	33,285		32,268	1,017	0	0			
2008-59	261,067	18,348	230,819	5,614	497	5,789			
Total Pounds	3,635,061	213,236	2,202,241	179,867	95,784	311,233	487,502	55,011	90,187
Total Bales	7,330	433	4,443	359	193	625	985	110	182

TABLE H2. 2007 Organic Cotton Crop
Below is only a sample of the data; see link to full dataset (Table H2 Data)

2007 Organic Cotton Crop

The column labeled Farm No does not contain actual farm numbers but rather contain unique identifiers that allow farm level analysis.

Payments Received by Producers

	Avg./Total	Pool 1	Pool 2	Pool 3	Pool 4	Pool 5	Trans 1-3	Trans 4	Trans 5
Bales	14,878	3,606	7,343	852	144	361	2,171	87	314
Pounds	7,336,854	1,758,420	3,637,363	427,150	69,493	176,568	1,069,543	43,775	154,542
Total Payment per Lb	1.196	1.345	1.229	1.095	0.953	0.817	1.031	0.878	0.773

Production by Farm

Farm No.	Total Lbs.	Pool 1	Pool 2	Pool 3	Pool 4	Pool 5	Trans 1-3	Trans 4	Trans 5
2007-001	329,847	29,987	233,222	57,154	975	8,509			
2007-002	119,959	69,641	32,275	9,260		8,783			
2007-003	176,397	13,488	107,347	33,179		22,383			
2007-004	384,959	13,552	274,199	73,072		24,136			
2007-005	171,814	16,850	134,595	13,325	6,551	493			
2007-006	73,540	32,833	39,214		1,493				
2007-007	62,335	511	59,315			2,509			
2007-008	53,085						50,014		3,071
2007-009	148,876	4,885	96,885	33,512		13,594			
2007-010	132,641		55,125	66,958		10,558			
2007-011	115,569	493	57,015	35,981	14,999	7,081			
2007-012	150,150						78,653		71,497
2007-013	118,793						118,793		
2007-014	102,917	1,439	98,964	518	1,511	485			
2007-015	9,639	5,809	3,830						
2007-016	5,517			493	511	4,513			
2007-017	68,881	18,058	50,823						
2007-018	183,449	6,861	173,804	1,010		1,774			
2007-019	97,989	19,289	62,831	5,019	7,372	3,478			
2007-020	27,705	1,526	22,118	4,061					
2007-056	104,903						78,564	23,814	2,525
2007-057	338,280	139,752	194,564	3,495		469			
Total Pounds	7,336,854	1,758,420	3,637,363	427,150	69,493	176,568	1,069,543	43,775	154,542
Total Bales	14,878	3,606	7,343	852	144	361	2,171	87	314

TABLE H3. 2006 Organic Cotton Crop
Below is only a sample of the data; see link to full dataset (Table H3 Data)

2006 Organic Cotton Crop

The column labeled Farm No does not contain actual farm numbers but rather contain unique identifiers that allow farm level analysis.

Payments Received by Producers

	Date	Avg./Total	Pool 1	Pool 2	Pool 3	Pool 4	Pool 5	Trans
Bales		5,940	563	2,763	996	391	968	259
Pounds		2,951,388	276,943	1,377,718	499,557	193,680	475,560	127,930
Total Payment per Lb		1.051	1.301	1.134	1.005	0.906	0.805	0.928
	Estimate							

Production by Farm

Farm No.	Total Lbs.	Pool 1	Pool 2	Pool 3	Pool 4	Pool 5	Trans
2006-1	40,939	6,487	23,918	10,534			
2006-2	30,246		20,445	2,527	7,274		
2006-3	50,381		14,427	8,001	13,344	14,609	
2006-4	91,683	497	83,499	7,184	503		
2006-5	126,829	8,862	111,956	5,518	493		
2006-6	128,488	11,313	111,003	5,158		1,014	
2006-7	49,084						49,084
2006-8	121,440	23,739	92,066	5,635			
2006-9	64,431	45,551	18,880				
2006-10	71,159		11,241	28,659	29,761	1,498	
2006-11	81,283		65,844	10,566	4,873		
2006-12	41,143	31,067	9,080	996			
2006-13	28,249		5,910	4,849		17,490	
2006-14	27,409		13,153	1,846		12,410	
2006-15	3,384					3,384	
2006-16	12,056					12,056	
2006-17	46,221		9,349	22,805	12,501	1,566	
2006-18	88,924	6,384	60,272	7,029			15,239
2006-19	24,190		20,006	1,890	2,294		
2006-20	144,720	4,111	106,277	23,857	8,020	2,455	
2006-21	11,273						11,273
2006-22	67,081	487	26,739	18,435	17,516	3,904	
2006-23	40,101		2,497	934	2,417	34,253	
2006-49	256,675	60,379	146,167	39,536		10,593	
Total Pounds	2,951,388	276,943	1,377,718	499,557	193,680	475,560	127,930
Total Bales	5,940	563	2,763	996	391	968	259

TABLE H4. 2005 Organic Cotton Crop
Below is only a sample of the data; see link to full dataset (Table H4 Data)

2005 Organic Cotton Crop

The column labeled Farm No does not contain actual farm numbers but rather contain unique identifiers that allow farm level analysis.

Payments Received by Producers							
	Avg./Total	Pool 1	Pool 2	Pool 3	Pool 4	Pool 5	Trans
Bales	8,377	1,244	5,930	704	211	157	131
Pounds	4,145,895	614,600	2,928,699	352,648	104,248	79,246	66,454
Total Payment per Lb	1.037	1.204	1.040	0.905	0.787	0.698	0.863
Production by Farm							
Farm No.	Total Lbs.	Pool 1	Pool 2	Pool 3	Pool 4	Pool 5	Trans
2005-1	119,573	42,254	74,390	988	1,941	0	
2005-2	28,438	510	23,439	4,489	0	0	
2005-3	88,305	0	19,232	2,619	0	0	66,454
2005-4	16,155	0	10,458	5,697	0	0	
2005-5	84,621	17,688	59,822	4,086	3,025	0	
2005-6	159,177	4,451	82,142	64,046	5,466	3,072	
2005-7	88,050	10,579	61,766	11,164	500	4,041	
2005-8	92,531	6,407	62,646	491	17,926	5,061	
2005-9	79,528	1,482	77,569	477	0	0	
2005-10	62,486	30,861	24,738	1,464	4,937	486	
2005-11	13,854	4,012	9,842	0	0	0	
2005-12	12,960	5,252	7,708	0	0	0	
2005-13	12,167	6,828	4,866	473	0	0	
2005-14	93,020	0	74,781	16,725	1,514	0	
2005-15	50,450	0	12,483	25,511	10,941	1,515	
2005-16	15,684	0	15,165	519	0	0	
2005-17	14,959	0	0	3,665	11,294	0	
2005-18	59,990	0	25,926	21,155	1,523	11,386	
2005-19	62,260	982	52,191	8,065	1,022	0	
2005-20	21,810	479	11,400	7,290	1,554	1,087	
2005-21	101,979	4,429	93,539	4,011	0	0	
2005-22	4,076	0	4,076	0	0	0	
2005-23	111,175	49,794	49,525	2,066	9,790	0	
2005-24	26,551	0	20,332	5,260	959	0	
2005-25	88,650	8,168	71,950	6,012	2,520	0	
2005-45	46,320	0	0	528	479	45,313	
2005-46	347,096	21,552	261,873	59,697	3,016	958	
Total Pounds	4,145,895	614,600	2,928,699	352,648	104,248	79,246	66,454
Total Bales	8,377	1,244	5,930	704	211	157	131

TABLE H5. 2004 Organic Cotton Crop
Below is only a sample of the data; see link to full dataset (Table H5 Data)

2004 Organic Cotton Crop

The column labeled Farm No does not contain actual farm numbers but rather contain unique identifiers that allow farm level analysis.

Payments Received by Producers						
	Avg./Total	Pool 1	Pool 2	Pool 3	Pool 4	Pool 5
Bales	5,334	86	2,560	1,732	427	529
Pounds	2,640,500	42,861	1,266,420	861,592	208,984	260,643
Total Payment per Lb	0.922	1.197	1.012	0.888	0.749	0.693
Production by Farm						
Farm No.	Total Lbs.	Pool 1	Pool 2	Pool 3	Pool 4	Pool 5
2004-1	103,204		10,745	87,122	5,337	
2004-2	93,198		15,726	77,472		
2004-3	85,835		32,999	50,901	1,935	
2004-4	146,497		53,952	92,545		
2004-5	147,537		76,025	71,512		
2004-6	125,507	41,881	83,097			529
2004-7	27,434		485	20,608	6,341	
2004-8	25,285		4,868	18,491	1,447	479
2004-9	6,990		1,982	5,008		
2004-10	5,906		1,965	2,942	494	505
2004-11	5,849		3,944	1,905		
2004-12	78,686		62,095	6,249	2,696	7,646
2004-13	31,144		1,007	25,512	2,538	2,087
2004-14	10,296		5,641	4,655		
2004-15	9,857			6,782		3,075
2004-16	48,351		34,384	8,985	4,982	
2004-17	17,082		13,491	1,495	2,096	
2004-18	171,459		30,322	58,451	25,014	57,672
2004-19	63,564			1,432	16,301	45,831
2004-20	41,714		23,134	17,603	977	
2004-21	58,122		52,225	5,403		494
2004-22	330,888		279,627	47,782	2,511	968
2004-23	84,689		48,194	18,312	989	17,194
2004-24	204,895		117,747	34,280	3,944	48,924
2004-25	52,704		38,951	10,825		2,928
2004-35	106,847		1,928	17,990	59,116	27,813
Total Pounds	2,640,500	42,861	1,266,420	861,592	208,984	260,643
Total Bales	5,334	86	2,560	1,732	427	529

TABLE H6. 2003 Organic Cotton Crop
Below is only a sample of the data; see link to full dataset (Table H6 Data)

2003 Organic Cotton Crop

The column labeled Farm No does not contain actual farm numbers but rather contain unique identifiers that allow farm level analysis.

Payments Received by Producers						
	Avg./Total	Pool 1	Pool 2	Pool 3	Pool 4	Pool 5
Bales	2,461	557	1,202	526	97	79
Pounds	1,224,158	276,462	598,307	262,127	48,105	39,157
Total Payment per Lb	1.006	1.168	1.007	0.911	0.807	0.757
Production by Farm						
Farm No.	Total Lbs.	Pool 1	Pool 2	Pool 3	Pool 4	Pool 5
2003-1	168,297	3,479	143,825	20,993		
2003-2	96,967	37,932	50,997	8,038		
2003-3	141,723	53,852	75,796			12,075
2003-4	75,424		63,796	11,628		
2003-5	12,655		1,012	11,153		490
2003-6	19,505		14,514	3,488	1,503	
2003-7	43,567		21,777	14,818	6,972	
2003-8	6,990			6,990		
2003-9	24,692		16,951	7,741		
2003-10	48,073	40,351	7,207			515
2003-11	5,092		5,092			
2003-12	20,353	2,935	16,906	512		
2003-13	42,870		24,199	9,545	9,126	
2003-14	16,249		1,477	14,263	509	
2003-15	31,049		7,835	21,708	1,506	
2003-16	15,572		2,405	13,167		
2003-17	87,538	36,654	16,272	6,147	12,103	16,362
2003-18	6,398			2,954	3,444	
2003-19	1,927			500	1,427	
2003-20	6,040			6,040		
2003-21	58,360		40,089	18,271		
2003-22	8,008		5,496	2,512		
2003-23	109,594	17,952	39,375	47,219	5,048	
2003-24	13,410		1,984	6,934	4,492	
2003-25	25,091		6,049	18,525	517	
Total Pounds	1,224,158	276,462	598,307	262,127	48,105	39,157
Total Bales	2,461	557	1,202	526	97	79

TABLE H7. 2002 Organic Cotton Crop
Below is only a sample of the data; see link to full dataset (Table H7 Data)

2002 Organic Cotton Crop

The column labeled Farm No does not contain actual farm numbers but rather contain unique identifiers that allow farm level analysis.

Payments Received by Producers									
	Avg./Total	Pool 1	Pool 2	Pool 3	Pool 4	Pool 5	Trans 2	Trans 3	Trans 4-5
Bales	5,971	131	2,305	2,419	270	477	74	256	39
Pounds	2,932,351	62,759	1,129,183	1,188,942	133,134	237,116	36,288	125,962	18,967
Total Payment per Lb	0.718	0.907	0.777	0.707	0.647	0.557	0.687	0.617	0.577
Production by Farm									
Farm No.	Total Lbs.	Pool 1	Pool 2	Pool 3	Pool 4	Pool 5	Trans 2	Trans 3	Trans 4-5
2002-1	70,098		31,684	35,483		2,931			
2002-2	132,754		56,608	74,589		1,557			
2002-3	46,081		2,405	43,676					
2002-4	78,827		51,144	27,683					
2002-5	59,630		28,377	30,275	464	514			
2002-6	33,719		25,645	7,030		1,044			
2002-7	88,372	28,893	55,599			3,880			
2002-8	63,580						7,815	52,801	2,964
2002-9	72,694		506	20,692		51,496			
2002-10	52,431		7,266	37,905	1,986	5,274			
2002-11	39,418		15,528	20,962	488	2,440			
2002-12	8,048		6,081	1,441		526			
2002-13	16,783		6,186	10,137		460			
2002-14	54,212		7,196	9,686	7,240	30,090			
2002-15	15,668			3,943	5,590	6,135			
2002-16	12,894		493	2,452	5,472	4,477			
2002-17	233,864		130,293	67,453		36,118			
2002-18	32,739			32,739					
2002-19	29,700		969	20,816	1,904	6,011			
2002-20	213,197		6,815	192,311		14,071			
2002-39	74,400	9,614	56,375			8,411			
2002-40	168,087		55,635	106,354	498	5,600			
Total Pounds	2,932,351	62,759	1,129,183	1,188,942	133,134	237,116	36,288	125,962	18,967
Total Bales	5,971	131	2,305	2,419	270	477	74	256	39

TABLE H8. 2001 Organic Cotton Crop
Below is only a sample of the data; see link to full dataset (Table H8 Data)

2001 Organic Cotton Crop

The column labeled Farm No does not contain actual farm numbers but rather contain unique identifiers that allow farm level analysis.

Payments Received by Producers											
	Avg./Total	Pool 1	Pool 2	Pool 3	Pool 4	Pool 5	Trans 1	Trans 2	Trans 3	Trans 4	Trans 5
Bales	4,989	69	1,306	1,176	357	415	142	1,178	278	27	41
Pounds	2,450,830	34,531	641,790	581,200	169,167	208,611	69,646	579,202	133,849	12,836	19,998
Total Payment per Lb	0.778	0.995	0.928	0.731	0.645	0.585	0.846	0.780	0.694	0.568	0.508
Production by Farm											
Farm No.	Total Lbs.	Pool 1	Pool 2	Pool 3	Pool 4	Pool 5	Trans 1	Trans 2	Trans 3	Trans 4	Trans 5
2001-1	121,670	2,466	85,452	25,646	8,106						
2001-2	63,869		40,654	22,327	888						
2001-3	119,746		74,526	43,796	1,424						
2001-4	45,956	27,213	10,979		5,338	2,426					
2001-5	104,826		48,232	50,938	4,199	1,457					
2001-6	56,715		26,309	18,160	11,234	1,012					
2001-7	79,420		25,211	34,158	1,364	18,687					
2001-8	71,343		26,913	28,569	11,650	3,751				460	
2001-9	29,756			18,258	971	10,527					
2001-10	99,136							81,822	14,415		2,899
2001-11	55,316		9,260	29,925	2,951	13,180					
2001-12	12,876			10,925	486	1,465					
2001-13	6,304			6,304							
2001-14	5,034			2,030		3,004					
2001-15	37,724		521	1,524	8,699	26,980					
2001-16	14,161			2,536	6,044	5,581					
2001-17	12,360							486	6,417		5,457
2001-18	26,659		2,454	19,679	1,514	3,012					
2001-19	27,968		1,075	17,500		9,393					
2001-20	194,653		45,592					128,629	15,894	1,501	3,037
2001-37	135,359		14,903	89,468	15,121	15,867					
2001-38	29,523		11,660	6,775	11,088						
Total Pounds	2,447,304	34,531	641,283	580,246	172,660	202,600	69,646	579,202	134,302	12,836	19,998
Total Bales	4,982	69	1,305	1,174	357	410	142	1,178	279	27	41

TABLE H9. 2000 Organic Cotton Crop
Below is only a sample of the data; see link to full dataset (Table H9 Data)

2000 Organic Cotton Crop

The column labeled Farm No does not contain actual farm numbers but rather contain unique identifiers that allow farm level analysis.

Payments Received by Producers											
	Avg./Total	Pool 1	Pool 2	Pool 3	Pool 4	Pool 5	Trans 1	Trans 2	Trans 3	Trans 4	Trans 5
Bales	3,140	0	385	355	423	433	0	753	257	296	238
Pounds	1,544,637	0	188,010	173,330	208,016	210,402	0	371,421	126,595	148,603	118,260
Total Payment per Lb	0.843	0.000	1.077	0.881	0.798	0.714	0.000	0.922	0.799	0.721	0.670
Production by Farm											
Farm No.	Total Lbs.	Pool 1	Pool 2	Pool 3	Pool 4	Pool 5	Trans 1	Trans 2	Trans 3	Trans 4	Trans 5
2000-1	14,893			5,346	9,061	486					
2000-2	17,353			945	5,790	10,618					
2000-3	116,328			975	4,829	1,458			10,250	58,620	40,196
2000-4	45,351		499	11,836	23,348	9,668					
2000-5	19,377				10,762	8,615					
2000-6	38,681				25,649	12,546				486	
2000-7	61,658					61,658					
2000-8	29,313				7,078	22,235					
2000-9	12,357			488							11,869
2000-10	8,273										8,273
2000-11	70,024							65,041	4,983		
2000-12	24,217								993	10,323	12,901
2000-13	36,021			12,364	10,493	4,520			499	5,080	3,065
2000-14	100,604								43,849	45,894	10,861
2000-15	14,296									7,474	6,822
2000-16	10,729				3,884	6,845					
2000-17	4,270				1,396	933			1,004	486	451
2000-18	1,440					1,440					
2000-19	13,624								1,937	6,804	4,883
2000-20	113,684							106,252	6,931		501
2000-34	63,927		33,015	22,884	7,081	479		468			
2000-35	17,223			2,537	14,686						
Total Pounds	1,544,638	0	188,010	173,331	208,016	210,402	0	371,421	126,595	148,603	118,260
Total Bales	3,140	0	385	355	423	433	0	753	257	296	238

TABLE H10. 1999 Organic Cotton Crop
Below is only a sample of the data; see link to full dataset (Table H10 Data)

1999 Organic Cotton Crop

The column labeled Farm No does not contain actual farm numbers but rather contain unique identifiers that allow farm level analysis.

Payments Received by Producers							
	Avg./Total	Pool 1	Pool 2	Pool 3	Pool 4	Pool 5	Trans
Bales	6,326	2	815	1,366	843	721	2,579
Pounds	3,087,223	945	398,734	668,856	410,299	346,330	1,262,059
Total Payment per Lb	0.714	0.979	0.839	0.718	0.690	0.678	0.690
Production by Farm							
Farm No.	Total Lbs.	Pool 1	Pool 2	Pool 3	Pool 4	Pool 5	Trans
1999-1	18,869		1,466	12,444	3,966	993	
1999-2	86,169						86,169
1999-3	77,582						77,582
1999-4	19,992		493	10,074	8,937	488	
1999-5	5,672		458	961	3,786	467	
1999-6	49,377		944	19,105	21,473	7,855	
1999-7	25,005				983	24,022	
1999-8	195,345			16,465	45,391	10,534	122,955
1999-9	50,695	945	9,156	2,512			38,082
1999-10	31,379						31,379
1999-11	34,169						34,169
1999-12	4,384						4,384
1999-13	17,165						17,165
1999-14	4,947						4,947
1999-15	4,462						4,462
1999-16	20,073		2,831	2,939			14,303
1999-17	20,039						20,039
1999-18	36,486						36,486
1999-19	95,000						95,000
1999-20	112,769						112,769
1999-21	30,625						30,625
1999-22	37,546						37,546
1999-23	29,861		911	12,826	14,266	1,858	
1999-24	29,986					29,986	
1999-46	51,717						51,717
Total Pounds	3,087,223	945	398,734	668,856	410,299	346,330	1,262,059
Total Bales	6,326	2	815	1,366	843	721	2,579

TABLE H11. 1998 Organic Cotton Crop
Below is only a sample of the data; see link to full dataset (Table H11 Data)

1998 Organic Cotton Crop

The column labeled Farm No does not contain actual farm numbers but rather contain unique identifiers that allow farm level analysis.

Payments Received by Producers							
	Avg./Total	Pool 1	Pool 2	Pool 3	Pool 4	Pool 5	Trans
Bales	4,325	1	609	1,589	452	385	1,289
Pounds	2,131,508	484	297,667	782,767	222,551	194,069	633,970
Total Payment per Lb	0.884	1.036	0.986	0.916	0.856	0.786	0.836
Production by Farm							
Farm No.	Total Lbs.	Pool 1	Pool 2	Pool 3	Pool 4	Pool 5	Trans
1998-1	9,291		962	8,329			
1998-2	50,008						50,008
1998-3	16,983		1,864	13,676	1,443		
1998-4	64,812		23,641	38,175	2,502	494	
1998-5	72,514		7,842	56,219	4,961	2,966	526
1998-6	49,331	484	30,360	18,012	475		
1998-7	34,153		14,477	10,985	8,691		
1998-8	54,758		25,210	22,162	7,386		
1998-9	192,819		12,757	82,689	4,438	23,564	69,371
1998-10	40,954		1,449	6,809	1,900		30,796
1998-11	59,266		11,935	27,678		956	18,697
1998-12	27,893		7,219	8,727			11,947
1998-13	46,118						46,118
1998-14	84,090						84,090
1998-15	52,934						52,934
1998-16	117,922			37,027	15,221	18,935	46,739
1998-17	97,732		13,288	44,499	491	39,454	
1998-18	26,616				23,690	2,926	
1998-19	123,966		7,766	91,142	13,693	11,365	
1998-20	43,282						43,282
1998-30	154,991		3,395	95,035	48,242	8,319	
Total Pounds	2,131,508	484	297,667	782,767	222,551	194,069	633,970
Total Bales	4,325	1	609	1,589	452	385	1,289

TABLE H12. 1997 Organic Cotton Crop
Below is only a sample of the data; see link to full dataset (Table H12 Data)

1997 Organic Cotton Crop

The column labeled Farm No does not contain actual farm numbers but rather contain unique identifiers that allow farm level analysis.

Payments Received by Producers							
	Avg./Total	Pool 1	Pool 2	Pool 3	Pool 4	Pool 5	Trans
Bales	3,456	61	1,189	949	533	724	
Pounds	1,713,532	30,401	588,899	468,702	265,094	360,436	
Total Payment per Lb	0.939	1.090	0.990	0.940	0.900	0.870	0.000
Production by Farm							
Farm No.	Total Lbs.	Pool 1	Pool 2	Pool 3	Pool 4	Pool 5	Trans
1997-1	28,930		14,459	9,957	1,484	3,030	
1997-2	23,550		14,704	8,352	494		
1997-3	42,240	488		25,146	13,144	3,462	
1997-4	54,657	1,457	30,498	10,904	10,787	1,011	
1997-5	44,008		44,008				
1997-6	81,459		28,699	37,948	10,258	4,554	
1997-7	28,006		18,733	7,816	1,457		
1997-8	53,227		20,667	25,382	4,319	2,859	
1997-9	55,899		14,989	3,990	33,858	3,062	
1997-10	4,222			2,341	1,881		
1997-11	13,073		484	8,932	3,193	464	
1997-12	40,258		2,864	985	6,732	29,677	
1997-13	6,855		1,956	500	4,399		
1997-14	25,255				25,255		
1997-15	13,876		1,454	4,461	7,961		
1997-16	6,389		1,982	3,435	972		
1997-17	193,128		16,131	94,752	12,573	69,672	
1997-18	111,172		1,020	12,153	14,880	83,119	
1997-19	65,137		26,327	34,914	3,896		
1997-20	139,835		29,495	35,304	5,423	69,613	
1997-21	11,995					11,995	
1997-22	106,421		97,873	8,095		453	
1997-31	32,655		12,128	12,634	7,893		
1997-32	18,087	500	14,676	2,421	490		
Total Pounds	1,713,532	30,401	588,899	468,702	265,094	360,436	0
Total Bales	3,456	61	1,189	949	533	724	

TABLE H13. 1996 Organic Cotton Crop
Below is only a sample of the data; see link to full dataset (Table H13 Data)

1996 Organic Cotton Crop

The column labeled Farm No does not contain actual farm numbers but rather contain unique identifiers that allow farm level analysis.

Payments Received by Producers		
	Avg./Total	Pool
Bales	3,830	3,830
Pounds	1,912,311	1,912,311
Total Payment per Lb	0.844	0.000
Production by Farm		
Farm No.	Total Lbs.	Pool
1996-1	17,717	17,717
1996-2	24,955	24,955
1996-3	112,905	112,905
1996-4	53,860	53,860
1996-5	100,748	100,748
1996-6	90,978	90,978
1996-7	116,682	116,682
1996-8	15,673	15,673
1996-9	80,716	80,716
1996-10	6,530	6,530
1996-11	5,189	5,189
1996-12	19,369	19,369
1996-13	5,553	5,553
1996-14	20,703	20,703
1996-15	58,014	58,014
1996-16	17,244	17,244
1996-17	109,911	109,911
1996-18	54,210	54,210
1996-19	228,343	228,343
1996-20	57,019	57,019
1996-21	204,196	204,196
1996-22	101,665	101,665
1996-30	35,146	35,146
Total Pounds	1,912,311	1,912,311
Total Bales	3,830	3,830

TABLE H14. 1995 Organic Cotton Crop
Below is only a sample of the data; see link to full dataset (Table H14 Data)

1995 Organic Cotton Crop

The column labeled Farm No does not contain actual farm numbers but rather contain unique identifiers that allow farm level analysis.

Payments Received by Producers			
	Avg./Total	Org	Trans
Bales	3,222	2,860	362
Pounds	1,603,713	1,423,290	180,423
Total Payment per Lb	0.703	0.703	0.703
Production by Farm			
Farm No.	Total Lbs.	Org	Trans
1995-1	18,768	18,768	
1995-2	44,826	44,826	
1995-3	40,045	40,045	
1995-4	90,035	90,035	
1995-5	113,402	113,402	
1995-6	85,974	85,974	
1995-7	57,408	57,408	
1995-8	19,496	7,109	12,387
1995-9	32,950	32,950	
1995-10	74,307	74,307	
1995-11	13,651	13,651	
1995-12	5,227	5,227	
1995-13	6,159	6,159	
1995-14	14,397	11,064	3,333
1995-15	29,339	29,339	
1995-16	73,936	73,936	
1995-17	9,605	9,605	
1995-18	13,112	13,112	
1995-19	45,913	45,913	
1995-20	6,405	6,405	
1995-21	15,060	15,060	
1995-22	7,905	7,905	
1995-40	28,178		28,178
Total Pounds	1,603,713	1,423,290	180,423
Total Bales	3,222	2,860	362

TABLE H15. 1994 Organic Cotton Crop
Below is only a sample of the data; see link to full dataset (Table H15 Data)

1994 Organic Cotton Crop

The column labeled Farm No does not contain actual farm numbers but rather contain unique identifiers that allow farm level analysis.

Payments Received by Producers				
	Avg./Total	Org Acala	Org Upland	Trans
Bales	3,735	239	1,165	2,331
Pounds	1,876,039	119,923	586,016	1,170,100
Total Payment per Lb	0.897	1.150	1.020	0.810
Production by Farm				
Farm No.	Total Lbs.	Org Acala	Org Upland	Trans
1994-1	24,866		24,866	
1994-2	13,290		10,244	3,046
1994-3	66,859			66,859
1994-4	115,767			115,767
1994-5	16,089	4,688	11,401	
1994-6	55,686			55,686
1994-7	132,418			132,418
1994-8	48,855	24,086	8,838	15,931
1994-9	89,006		21,888	67,118
1994-10	20,064		20,064	
1994-11	15,325		15,325	
1994-12	91,149	91,149		
1994-13	52,353		28,383	23,970
1994-14	43,503		43,503	
1994-15	12,637		12,637	
1994-16	62,288		62,288	
1994-17	138,038		138,038	
1994-18	52,692		52,692	
1994-19	13,285		13,285	
1994-20	28,220		28,220	
1994-21	3,449		3,449	
1994-22	2,889		2,889	
1994-23	14,217		14,217	
1994-32	53,764			53,764
Total Pounds	1,876,039	119,923	586,016	1,170,100
Total Bales	3,735	239	1,165	2,331

TABLE H16. 1993 Organic Cotton Crop
Below is only a sample of the data; see link to full dataset (Table H16 Data)

1993 Organic Cotton Crop

The column labeled Farm No does not contain actual farm numbers but rather contain unique identifiers that allow farm level analysis.

Payments Received by Producers					
	Avg./Total	Org Acala	Org Upland	Trans Acala	Trans Upl
Bales	6,388	20	1,324	68	4,976
Pounds	3,218,543	9,945	661,706	33,945	2,512,947
Total Payment per Lb	0.726	1.238	1.050	1.130	0.633
Production by Farm					
Farm No.	Total Lbs.	Org Acala	Org Upland	Trans Acala	Trans Upl
1993-1	33,290		21,688		11,602
1993-2	52,310		26,155		26,155
1993-3	8,404				8,404
1993-4	19,469		19,469		
1993-5	61,374		1,990		59,384
1993-6	62,428		2,007		60,421
1993-7	119,358		30,899		88,459
1993-8	99,888		10,121		89,767
1993-9	21,421				21,421
1993-10	126,852		9,250		117,602
1993-11	25,917		2,985		22,932
1993-12	67,305		4,130		63,175
1993-13	102,164				102,164
1993-14	24,453				24,453
1993-15	41,972				41,972
1993-16	70,339		70,339		
1993-17	21,900		21,900		
1993-18	16,012		16,012		
1993-19	34,915				34,915
1993-20	34,489	9,945		13,836	10,708
1993-52	21,348				21,348
1993-53	14,502				14,502
Total Pounds	3,218,543	9,945	661,706	33,945	2,512,947
Total Bales	6,388	20	1,324	68	4,976

Appendix I

Wholesale Organic Citrus Data

TABLE I1. 2007-2008 Florida Organic Citrus Sales for Fifteen Producers

2007-2008 Florida Organic Citrus Sales for Fifteen Producers

Crop	Quantity sold	Sale Units	Unit Sale Price ($)	Quantity sold (lbs)	Price per Pound ($)	Total Sales ($)
Hamlin Orange	6,317	4/5 carton	17.28	252,680	0.43	109,158
Hamlin Orange	10,423	Bagmaster	21.62	416,920	0.54	225,345
Valencia Oranges	8,438	4/5 carton	16.80	337,520	0.42	141,758
Valencia Oranges	19,019	Bagmaster	20.81	760,760	0.52	395,785
Ambersweet Orange	922	4/5 carton	17.41	36,880	0.44	16,052
Ambersweet Orange	1,313	Bagmaster	21.54	52,520	0.54	28,282
Cara Cara Navel	3,703	4/5 carton	20.85	148,120	0.52	77,208
Cara Cara Navel	143	Bagmaster	22.00	5,720	0.55	3,146
Navel Orange	1,846	4/5 carton	19.71	73,840	0.49	36,385
Navel Orange	1,571	Bagmaster	22.75	62,840	0.57	35,740
Red Grapefruit	6,143	4/5 carton	31.41	245,720	0.79	192,952
Red Grapefruit	4,564	Bagmaster	35.07	182,560	0.88	160,059
White Grapefruit	1,289	4/5 carton	23.24	51,560	0.58	29,956
White Grapefruit	297	Bagmaster	28.55	11,880	0.71	8,479
Sunburst Tangerine	10,239	2/5 carton	16.73	409,560	0.42	171,298
Sunburst Tangerine	9,000	Bagmaster	25.13	360,000	0.63	226,170
Honey Tangerine	4,388	2/5 carton	17.84	175,520	0.45	78,282
Honey Tangerine	2,096	Bagmaster	30.67	83,840	0.77	64,284
Orlando Tangelo	3,022	4/5 carton	16.36	120,880	0.41	49,440
Orlando Tangelo	1,897	Bagmaster	21.45	75,880	0.54	40,691
TOTALS				3,865,200		2,090,471

Source: Compiled from packer records for 15 producers

TABLE I2. 2008-2009 Florida Organic Citrus Sales for Fifteen Producers

2008-2009 Florida Organic Citrus Sales for Fifteen Producers

Crop	Quantity sold	Sale Units	Unit Sale Price ($)	Quantity sold (lbs)	Price per Pound ($)	Total Sales ($)
Hamlin Orange	3,510	4/5 carton	14.92	140,400	0.37	52,369
Hamlin Orange	12,086	Bagmaster	20.16	483,440	0.50	243,654
Valencia Oranges	2,964	4/5 carton	17.45	118,560	0.44	51,722
Valencia Oranges	5,110	Bagmaster	22.16	204,400	0.55	113,238
Ambersweet Orange	927	4/5 carton	16.54	37,080	0.41	15,333
Ambersweet Orange	1,557	Bagmaster	22.27	62,280	0.56	34,674
Cara Cara Navel	4,437	4/5 carton	18.38	177,480	0.46	81,552
Cara Cara Navel	252	Bagmaster	11.75	10,080	0.29	2,961
Navel Orange	6,519	4/5 carton	17.79	260,760	0.44	115,973
Navel Orange	5,630	Bagmaster	24.62	225,200	0.62	138,611
Red Grapefruit	10,968	4/5 carton	34.12	438,720	0.85	374,228
Red Grapefruit	5,139	Bagmaster	33.65	205,560	0.84	172,927
White Grapefruit	322	4/5 carton	25.00	12,880	0.63	8,050
Sunburst Tangerine	21,162	2/5 carton	16.41	846,480	0.41	347,268
Sunburst Tangerine	14,422	Bagmaster	26.24	576,880	0.66	378,433
Honey Tangerine	2,227	2/5 carton	19.19	89,080	0.48	42,736
Honey Tangerine	846	Bagmaster	29.84	33,840	0.75	25,245
Robinson Tangerine	2,481	2/5 carton	18.53	99,240	0.46	45,973
Robinson Tangerine	970	Bagmaster	28.18	38,800	0.70	27,335
Fallglow Tangerine	1,641	2/5 carton	18.59	65,640	0.46	30,506
Fallglow Tangerine	242	Bagmaster	30.00	9,680	0.75	7,260
Orlando Tangelo	4,154	4/5 carton	13.97	166,160	0.35	58,031
Orlando Tangelo	1,948	Bagmaster	13.93	77,920	0.35	27,136
TOTALS				4,380,560		2,395,215

Source: Compiled from packer records for 15 producers